

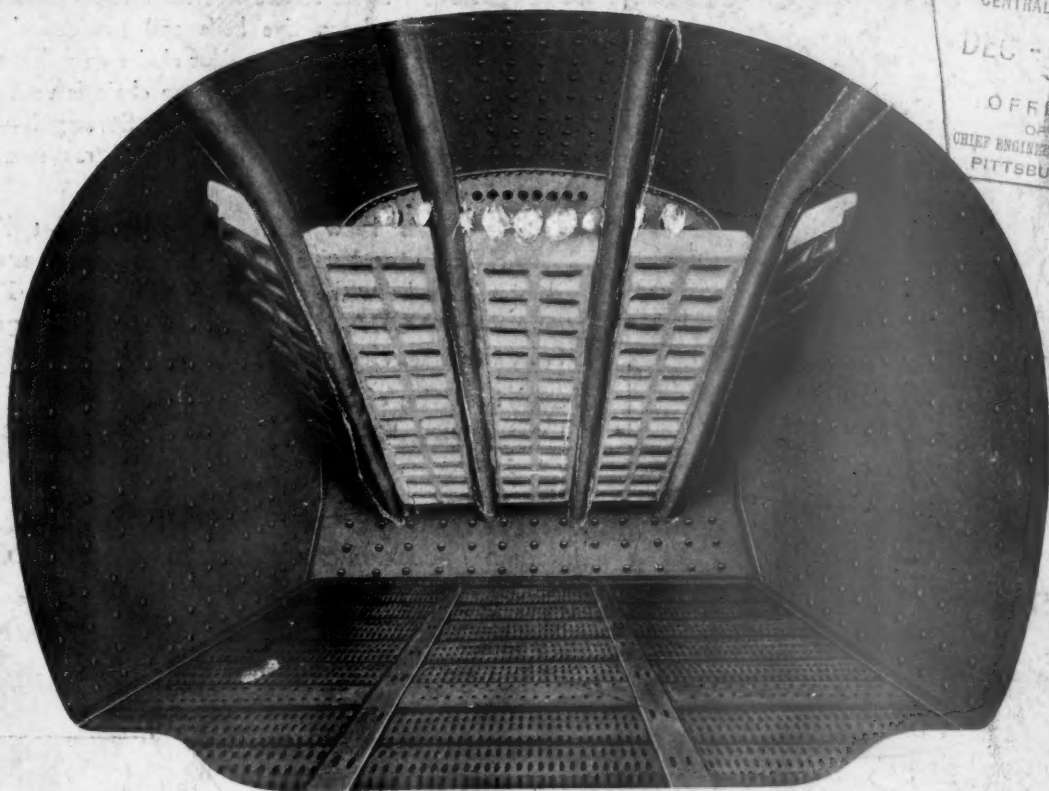
# Railway Age

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SIXTY-FIFTH YEAR

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# EDITORIAL

## Railway Age

# EDITORIAL

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The September statement of railway earnings and expenses just issued by the Interstate Commerce Commission makes an unsatisfactory showing. The effect of the rate increases is only partially reflected because a considerable portion of the business handled was billed in August at the old rates and because in some states the full amount of the increases has not yet been applied to the intrastate traffic. With an increased volume of traffic as compared with September, 1919, the freight revenues show a gain of only 27 per cent and the passenger revenues of only 17 per cent. The wage increase awarded by the Railroad Labor Board in July, however, was in full effect throughout the month and also some \$2,701,000 of back pay chargeable to prior months was included in the September operating expenses, which were about 28 per cent greater than for September, 1919. The net operating income for the month was only \$75,310,311, or actually less than for September, 1919, when it was \$77,648,722, and the operating ratio was 83.01 as against 80.2 last year. It will be necessary to await the returns for October before it will be possible to ascertain the full effect of the rate increase. Meanwhile a striking illustration of the way expenses have increased is afforded by the fact shown in the report, that for the first nine months of 1920—a period in which the railroads handled a larger volume of business than ever before in a similar period—there was a deficit of \$87,402,050 as compared with a net operating income in the corresponding period of 1919 of \$402,344,166. Although the operating revenues increased by \$657,000,000 the expenses were \$1,073,000,000 greater and taxes were \$63,000,000 greater.

### September Earnings and Expenses

The production of freight cars for domestic service in October showed an encouraging increase over the total for the month of September and was in fact nearly twice the monthly average for production in the preceding months of the year. The figures supplied by the 23 leading car manufacturing companies reporting to the Railway Car Manufacturers Association showed a domestic production in October of 5,999. This compares with a total of 3,529 in September and with an average monthly production for the earlier months of the year of slightly over 3,000. The figures in question are given in detail in an item in the Equipment and Supplies column of this week's issue. From the data given it will also be observed that the total domestic production of freight cars to the end of October was 33,584. The production of cars for export in October was 668 and the total production to the end of October was 12,264. The passenger car output for domestic service was 21, making a total of 129 for the year up to October 31. The big increase in domestic freight car production in October does not mean that the car building industry is as yet working to capacity. It does mean, however, that the industry is recovering from the low level at which it was during the summer months. This improvement is expected to continue and the November figures will no doubt show increases over the total domestic production in October. The total for domestic freight car orders on hand

### Car Building In October

and undelivered on October 31 was 46,051, on September 30 it was 48,114 and on July 31, 50,275. It is unfortunate that this total is being reduced with a monthly production of from only 3,000 to 6,000 cars.

In one sense the foundation of track maintenance is the labor which is required to perform the work. That it is a large factor is too well recognized to need emphasis. The manner in which maintenance of way labor has been "hired and fired," in order to keep pace with the varying changes in allowable expenditure, is indicative of its importance, at least from the standpoint of money. The most remarkable fact regarding these changes in expenditure is that they are made chiefly by changes in force, the men themselves being considered as so many units at some fixed value per unit. Seldom if ever is any consideration given to efficiency, ability, character, or any of the other numerous qualifications which are considered as of such prime importance in the business world. Yet every one of the qualifications is just as necessary in the conduct of successful maintenance as in any other line of business, no matter how specialized. It is a distinction of degree only. The proper performance of track work requires more than supervision plus animal force, no matter how well directed the supervision may be. It necessitates the use of capable workmen. Then and then only does intelligent supervision obtain the needed results at the lowest cost. Track labor is an operating factor, and as such, it should be thoroughly investigated, studied and planned, for only in this way can results be obtained that will show permanent economies affecting every department. Almost any locomotive will pull a train, to some extent or other, and almost any man will work, also to some extent or other, but no modern railroad buys or builds its locomotives on a "hit or miss" plan. Why place the man below the machinery? The man costs more in the long run.

### The Influence of Track Labor on Maintenance

It is an axiom among mine operators that if living conditions in the mining community are such that the women are contented, they need not anticipate any serious labor agitation on the part of the mine workers. While the situation throughout a typical mining district bears no parallel to the conditions encountered in railroad service, it would not be difficult to prove that any reasonable expenditure on the part of the railroads toward making the living conditions available to employees, particularly at outlying terminals, more comfortable and the surroundings more wholesome is the best kind of investment. Moreover, there is a moral obligation involved which the railroads cannot conscientiously ignore. Road service differs from almost every other industrial occupation, as the employee is required to travel a great part of his time and must spend much of this time in idleness at outlying terminals. The railroads are, in a sense, the custodians of every man whose life work is devoted to train or engine service and they should seek to assume rather than evade this responsibility.

### Where the Promise Is Performed

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bility. The most inspiring feature in connection with a new locomotive terminal project recently completed is the handsome and commodious Y. M. C. A. building with appointments that in many respects equal those of a first-class hotel. Here the promise is performed, the hundreds of train and enginemen are assured a clean, comfortable bed, a wholesome, appetizing meal, and a healthy moral atmosphere. If you doubt the extent to which such things are appreciated by employees, talk this over some morning with an engineman who could not get a decent cup of coffee for breakfast, or a fireman who spent the night in a shanty adjoining the lunch counter. These men are in much the same condition for the return trip as a locomotive that has been turned without having its fire cleaned and the situation is not one calculated to improve the capacity of employees for loyal and effective service. It is not too much to say that the Railroad Y. M. C. A. which is actuated by motives that are above material gain, or the Fred Harvey meal service that is available to employees at railway terminals on a basis of service rather than profit, or any other institution that is designed primarily to enhance the comfort and the morale of railway employees, is just as important to the successful operation of a railroad as any part of the physical equipment designed for the maintenance of locomotives and cars.

The statement that prior to the great war the stores department on the Trans-Siberian Railway was required to maintain a three-year stock of all materials

#### A Material Consideration

may startle some of our best authorities on the service of supply. Yet it is this stock of material that has enabled the shops on that railroad to continue operations through the vicissitudes of war and revolution. The motive governing this unusual policy was plainly the desire to put service ahead of every other consideration. The railroad must run, come what may and cost what it will. There is obviously no occasion for such tremendous material reserves in this country even if we could afford them and the railroads should be encouraged to reduce rather than enlarge material stocks. It is believed that when comparative statistics are available which indicate the true amount of unapplied material on every railroad, some roads will discover that in comparison with adjacent railroads they are carrying an excessive amount of certain materials to no good purpose. However, in this country as in old Russia, the question of service should be considered in advance of any economies that can be effected through reducing material stocks. There are places on the railroad where a considerable surplus would be preferable to a slight shortage. Locomotive terminals, particularly at outlying points, must always have an ample supply of packing, arch brick and many other specialties essential to keeping locomotives in service without interruption.

In last week's issue we presented an estimate of the deficiency in rail renewals made by C. W. Gennet, Jr. Further data

#### Further Data on Adequate Rail Renewals

relative to this same important subject will be found in this issue in the form of a table of rail production, exports, imports and estimated consumption, as prepared by the American Iron and Steel Institute covering the years 1874 to 1919, inclusive. Since the figures for rail consumption given include rails purchased by street car lines, interurbans and industrials, in addition to those of the steam roads, they are obviously not comparable with the data compiled by the United States Railroad Administration on tonnages of rails purchased and laid by the railroads under government control. However,

since the mileage of the steam roads constitutes nearly 90 per cent of the track mileage of the country, the consumption tonnages referred to will serve very well for general comparisons. The most remarkable fact brought out by these data is that the rail consumption in 1919 was smaller than in any year since 1897 and equal to only 43 per cent of the consumption of the banner year, 1906. However, as a study of this table will disclose, the yearly totals are exceedingly variable. Consequently, it is better to consider averages. Thus, we find that the average consumption for the six years, 1914 to 1919, inclusive, is 2,021,590 tons while for the ten years, 1904 to 1913, it was 2,804,369 tons. To be sure these figures are influenced by new construction, weight and density of traffic and gross mileages of track involved, as well as other variables. No attempt will be made to arrive at a definite estimate of the present deficiency which must also take into account the rails laid in 1920 for which no figures are now available. That this deficiency is one of the most serious problems of the railways today cannot be questioned.

An authority on air brake matters has estimated that under average conditions, 55 per cent of the air compressed by the

#### Cost of Leaks in Train Lines

air compressor on the locomotive is wasted. The greater part of this waste is caused by leaks in the train line, of which the most important and the hardest to detect are those occurring in the hose. When trains are pumped up before departure the inspector makes a cursory examination to detect audible leaks but leaks in porous hose can seldom be heard and usually are not found. The extent of the loss from this cause is shown by the fact that in a series of tests of trains of 65 cars, by removing from five to eight porous hose, the rate of leakage in the train line, which had ranged from 12 to 20 lb. per minute, was reduced to 6 to 8 lb. per minute. Excessive leakage is both costly and troublesome. The amount of steam used by the air compressors may amount to as much as 10 per cent of that used by the locomotive cylinders and if this can be cut in half, as in the cases cited above, a direct saving of 5 per cent in fuel will result. Many terminal delays are caused by inability to get the required train line pressure, due solely to porous hose, and on the road the leakage causes difficulty in handling trains. The remedy for this condition is not difficult of application nor expensive. In the first place, the uncoupling of cars without first parting the hose by hand must be stopped as this is the principal cause of porous hose. It is not enough to issue instructions to all concerned. Some employee must be delegated to part the hose on all incoming trains. To make sure that hose are not allowed to remain in service after they have become porous, periodical tests must be made by painting the hose with soap suds. The saving through the elimination of leakage was estimated in 1918 to be at least \$35 per car per year. Under present conditions, it would certainly be much greater.

No single governmental function is so narrowly understood as the activities of the United States Patent Office. Regard-

#### Everybody's Business

ed generally as an institution for protecting a proprietary interest in inventions that affect the public welfare, its part in promoting inventions that have enhanced the comforts and pleasures of life a thousand fold is seldom comprehended. The rapid development of railroad facilities in this country could not have been realized had it not been for the broad scope of our patent laws. It is hardly probable that George Westinghouse would have applied himself so persistently to the development of the air brake or that the inventors of a hun-

dred other devices essential to modern railroading would have sacrificed the time and money required for the development of these devices if they had not been assured of a proprietary interest in their invention by virtue of our patent laws. The electric light, the telephone and a thousand other important developments owe their introduction into our everyday existence to our system of patent protection. As the mass of inventions presented to the patent office is multiplying daily, it is of the utmost importance to transportation as to every other branch of human activity that the patent office function promptly and effectively. It is discouraging to observe that the efficiency of this important work should be impaired because the salaries of the technical experts of the patent office have been held to pre-war standards. There is little excuse for such a situation in view of the fact that the fees received by the patent office exceed the running expenses of that office and that a surplus is turned over to the Secretary of the Interior which goes to make up the deficit incurred by some other governmental activity. The railroads and the industries that supply the railroads may well feel concerned when it takes months to get decisive action on many important inventions. There should be an incentive to hold the best men in the patent office rather than to attract them away. It is everybody's business to impress these facts upon the new congress.

### Will Railway Employees Help Reduce Operating Expenses?

**R**AILROAD LABOR ORGANIZATIONS are approaching an important crisis in their history. The prices of most commodities are declining, thus undermining the high cost of living argument which was used effectively for the present high wages of railway employees. These reductions of prices are reducing the incomes of some of the largest classes of people in the country, especially the farmers. Reductions of wages also are being made in many industries. The result is that the high wages of railroad employees already are beginning to stand out prominently. They will stand out more prominently as prices and wages in other industries continue to decline.

Meantime the advances in freight and passenger rates granted to the railways by the Interstate Commerce Commission are failing to produce the net returns the commission expected. To have earned that month's portion of the 6 per cent annual return the railways should have earned in September about \$109,000,000 net operating income. They earned only \$75,310,000. There were several special reasons for this. A substantial part of the traffic delivered started to move in August and was carried at the old rates. The September expenses included about \$2,700,000 of retroactive advances in wages properly chargeable to preceding months. In many States advances in intrastate rates corresponding to the advances in interstate rates have not been made. On the whole, however, it begins to seem very improbable that on the present general basis of operating expenses and the basis of all the advanced rates, state and interstate, contemplated by the commission in its recent decision the railways can earn as much net return as the commission estimated.

The commission, has, however, accepted the principle that under existing conditions the railways must, in the public interest, earn an average of 6 per cent. The situation is, therefore, raising very directly the question whether the further increases in net returns the railways must have are going to be obtained by further advances in rates or by reductions of operating expenses. At a time when the prices of most commodities and the wages of many working men are declining there would undoubtedly be vigorous opposition

to further advances in rates. The needed additional net earnings required probably should, and must be secured by reductions of operating expenses. In this connection, it is important to remember that the law requires the commission to fix rates which will yield the returns specified in the Transportation Act only if the railways are being efficiently and economically operated. Therefore, before the commission authorized any further advances in rates it would not only be pertinent, but its duty, for it to inquire whether the railways actually are being efficiently and economically operated.

When it inquired regarding the use being made of the available tracks, terminals, locomotives and cars, it would find the record demonstrates they are being used more efficiently than ever before. The largest item of railway expenses, however, is wages, which are now almost 60 per cent of operating expenses. It is quite conceivable, and even probable, that this part of the expenses would be found excessive either because the wages being paid are too high or because the men who receive wages are not doing as efficient work as they should, thus making it necessary to employ an excessive number of men. If the commission found that the net return of the railways was too small because their operating expenses were too large; that their operating expenses were too large because their pay-roll was too large; and that their pay-roll was too large because the wages paid were too high, it would raise a very important question for consideration by the Railroad Labor Board. If it found the pay-roll was too large because the inefficiency of labor resulted in the employment of an excessive number of men it would raise an important question for consideration by railway officers and by railway labor leaders and members of their organizations.

The question of the reasonableness of present railway wages already is being raised by the leaders of some organizations of farmers and by business men in all parts of the country who have to compete with the railways for labor. It will be only a matter of time until the leaders and members of railroad labor organizations will be called on to defend them. If the wages of railroad labor can then be shown to be relatively higher, as compared with those of pre-war times, than the incomes of farmers and the wages of other working men, there will be only one valid argument which can be made against their reduction. This is that the efficiency of the work of railway employees has increased so much since pre-war times that they are earning their advanced wages by increased service per man to the railways, and through them to the public which, in the last analysis, pays all railway expenses. This argument cannot be made at the present time, because the efficiency of railway labor has not been restored to anywhere near the pre-war basis.

What are the leaders of the railway labor organizations doing to furnish their members real protection against reductions in wages? Are they carrying on propaganda to cause employees to do more and better work? If so, they are very successful in preventing publicity from being given to the fact. On the contrary, they are carrying on propaganda for the Plumb plan and using it in attacks upon the railway companies and private operation which are adapted and apparently intended to prevent increases of efficiency among the employees. They are also trying to secure the establishment of national boards of adjustment to which could be carried a wide variety of questions arising between the employees and the managements of the individual railroads.

It is well known that there are differences of opinion among railway executive and operating officers regarding the advisability of national boards of adjustment. Many favor them, but a majority oppose them. Those who oppose them may or may not be right, but there is no question as to the

reason for their attitude. They oppose the national boards of adjustment and favor boards of adjustment local to each line because they believe that only by getting out of the hands of national organizations of the railways and of their employees, and transferring to local boards of officers and employees the settlement of as many questions as possible can they secure the better discipline and greater effort on the part of railway labor which is necessary to securing the needed efficiency and economy of operation.

Railway officers, whether in favor of or opposed to national boards of adjustment, offer many concrete suggestions for increasing the efficiency of labor. Many of them would like to restore piece work in the shops. Most of them would like to break down the many absurd and indefensible rules and agreements regarding conditions and methods of work which result in many millions of dollars being paid by the roads for work which is not done. Most of them would like to see the abolition of punitive overtime in train service, which affords to train service employees a direct incentive unnecessarily to protract the time which freight trains take in getting over the road and unnecessarily increases expenses. On the other hand, the labor leaders have not come forward with a single suggestion for increasing the efficiency of labor or reducing operating expenses except the absurd and fantastic Plumb plan.

Now, one thing is certain. The present high average operating cost, including the labor cost, of moving a ton one mile and a passenger one mile must be reduced. The labor cost of rendering each ton-mile and each passenger-mile of service can be reduced by increasing the efficiency of each employee or by reducing the wages of each employee; and, regardless of whether national boards of adjustment or local boards of adjustment are established, this labor cost must and will be reduced just as other items of railway expenses must and will be reduced.

The Railroad Labor Board established the present scales of railway wages. To it also has now been submitted for consideration the question of the establishment of national or local boards of adjustment. The question of future wages will not be directly raised in the consideration of this matter, but they really are merely two phases of one general problem, viz., the problem of putting the relations between the railways and their employees on a basis where the cost of labor will be made reasonable. The railways' costs are not now reasonable, and they must be made reasonable if the roads are to serve the public at reasonable rates and at the same time earn a net return which will enable them adequately to increase their facilities. The conclusion reached by the Railroad Labor Board should be based primarily on recognition of the public's right to have the employees render a service to the railways, and through them to the public, proportionate to the amount of wages they are paid, and should be intended primarily to help establish relations between the railways and their employees under which this will be done.

Meantime, it is to be hoped that railway employees and the leaders of their labor organizations will recognize the fact that the wages and conditions of employment of railway employees are rapidly coming to occupy a more and more prominent place in the minds of farmers and business men, and that in the long run nothing will prevent reductions in present railway wages unless it can be shown that the employees are doing all that they reasonably can to earn them. There are several classes of employees, especially those employed in the shops, who will have to increase their efficiency very greatly and contribute very largely toward reducing railway expenses before they will be able to convince anybody but themselves that they actually are earning their present wages.

The *Railway Age*, in an editorial in its last issue, urged the managements of the railways to use methods in attempting to solve the present labor problem which would tend to

win the co-operation of the employees and their organizations, rather than increase antagonisms. But the managements must secure greater economy in operation; and if the employees and their organizations do not put their shoulders to the wheel and help reduce operating costs in spite of present wage scales, then they must expect the present wage scales to be made in a short time the object of serious attacks.

## Commodity Prices and Railway Rates

FROM THE STANDPOINT of both the railroads and the public it is unfortunate that the large advances in railway rates, made necessary chiefly by increases in operating expenses under government control, were not made until the prices of many commodities began to decline. The extensive reductions in the prices of commodities and the cost of living which have occurred since the advances in freight rates were made at the end of August have, however, had one salutary effect. They have completely refuted the absurd argument made by some opponents of advances in rates that they would cause a five times greater increase in the cost of living. Since the rapid decline in the cost of living began almost simultaneously with the recent large advance in freight rates, it seems reasonable to hope that we shall never again hear this silly argument.

A more recent contention which apparently has more validity is that because the advance in rates was made just when prices began to decline, it has imposed a heavy burden upon producers and business concerns, whose prices have been reduced. Even this argument, however, has not much validity, because in spite of the recent advance in freight rates and declines in prices, freight rates still are relatively much lower compared with the prices of most commodities than they were before the war.

In the absence of definite statistical information regarding the actual revenues of the railways under the new rates, we can only estimate what has been the increase in the average rate per ton per mile in this country since before the war. Taking into consideration all the advances in freight rates which have been made, however, it is probable that the average rate per ton per mile is now about 81 per cent higher than in 1913. If this estimate errs, it exaggerates rather than understates the average increase in rates. In spite of recent reductions in prices, there apparently are only two classes of commodities whose wholesale prices are not at the present time relatively much higher as compared with railway rates than they were before the war. The statistics of the Bureau of Labor indicate that on November 1 the average price of farm products was only 82 per cent higher than before the war, and the average price of metals and their products only 84 per cent higher. The average wholesale prices of food-stuffs were still 104 per cent higher than in 1913, and those of clothes and clothing, 157 per cent higher. Those of building materials were 214 per cent higher; those of chemicals, 116 per cent higher; those of fuel, 182 per cent higher; those of house furnishings, 271 per cent higher, and the prices of miscellaneous commodities, 129 per cent higher. The weighted average price of all commodities was 125 per cent higher.

It is a fact now generally conceded that before the war railway rates were too low. They were so low that the new investment in railroad facilities was rapidly declining. Although, however, before the war railway rates were too low, the statistics show that as compared with prices in general they are relatively even lower now than they were then. Comparisons with existing wages in almost all industries would also show that the advances in railway rates have not made them anywhere near as high relatively as wages. In the railroad industry itself the average advance in rates has been less than two-thirds as great relatively as the average advance in wages.

If, under present conditions, farmers and business men find themselves burdened by excessive costs of doing business, they cannot successfully maintain that one of these excessive costs is railway freight charges.

## The Motor Truck as a Railway Facility

UP TO THE PRESENT TIME railway men and motor truck manufacturers alike have commonly looked upon their respective agencies of transportation as primarily competitive in character with little thought of the possibilities of the railways themselves using motor trucks as aids in the conduct of their varied operations. This impression has been created largely by the widespread reports of fleets of motor trucks carrying important traffic long distances during the period of abnormal and acute car shortage of the past two years. Now that transportation conditions are fast returning to normal and the car supply is again sufficient to meet the demands, this traffic is returning to its original and natural channels.

Of more direct and permanent interest to both railway and motor truck operators is the possibility of correlating these agencies. Up to the present time neither has given much thought to this phase of their relationship, yet the motor truck offers large possibilities to the steam railroads as an agency in the performance of many tasks which confront them. When one considers the diversity of operations on a large railway and the extent to which the motor truck has entered other industries, it is surprising that it has not received more general consideration on the part of the roads. It has seemed strange to railway men that such limited attention as the manufacturers of motor trucks have given to the possibility of securing the railways as customers for their product has been largely with the idea of extending the activities of the roads from the freight house to the store door and from stations along existing lines to interior points, remote from railway facilities. Many students of the transportation problem at large have advocated the railways operating motor trucks beyond the ends of branch lines and radiating from other stations to bring to their tracks traffic not now accessible directly by rail. However, railway men have not taken this suggestion seriously because of the present necessity that they concentrate on the intensive development of their properties to handle the traffic now offered without assuming any new responsibilities.

It is with the thought of effecting economies in the performance of the services the railways are now rendering that the motor truck deserves careful consideration from railway men.

There are many places on the railways in which a truck will demonstrate it has advantages similar to those which it has shown in industrial haulage. Among such operations may be enumerated the transfer of less-than-carload freight moving in interchange from one road to another, now commonly hauled across cities in trap cars or by other agencies; the transportation to central forwarding houses for consolidation of less-than-carload freight received at outlying sub-stations and now commonly moved by trap cars; the distribution of materials from local storehouses to various points in large terminals where they may be required by maintenance gangs; the transfer of railway materials from place to place about storeyards and other central points of assemblage, etc. At the present time when the railways are confronted with high operating costs, with congestion in terminals, etc., it is important that they consider every means for relieving these conditions. We shall further discuss the possibilities of the motor truck as a means to this end editorially in succeeding issues.

## St. Louis Southwestern

IN STUDYING THE RESULTS of the operation of many railway properties during the last two years one gains little information of help in estimating their future possibilities because of the abnormal conditions under which the roads have been operated. This is particularly true of the St. Louis Southwestern which was the source of one of the most active controversies between the corporate and federal managements during government control. Its corporate management criticized most severely the action of the Railroad Administration in dividing its system at the Texas state line and merging the two portions of the road with competing railways. Claims were made that traffic normally tributary to its lines was diverted over other lines and particularly that the maintenance of the property was neglected. Because of these contentions the road declined to enter into the standard form of agreement with the Railroad Administration during federal operation but chose rather to stand on its rights under the Federal Control Act. As a result of these conditions a better index of the outlook for this road is gained from a review of its operations during the period following the return of the property to its corporate management and its operation by these officers.

During the calendar year 1919 the St. Louis Southwestern failed to earn its standard return by \$2,348,755. In the face of this unfavorable showing its management refused to accept the government's guarantee of earnings for the six months' period ending September 1, and chose rather to proceed at once upon its own resources with the result that its net income for this period exceeded the standard return by \$306,754 after spending \$1,593,285 more for the maintenance of roadway and equipment than it is estimated that it would have been permitted to spend under the terms of the guarantee, which amounts accrued to the owners of the property. Of the few large roads which rejected the government guarantee, the Cotton Belt is one of only two or three which benefited by this decision. This result was attained after meeting in full the wage increases granted to employees by the Railway Labor Board and retroactive to May 1, which amounted to approximately \$900,000 during the four months of the guarantee period in which they were effective. As early as May, the management began to inflate operating expenses to meet the expected wage advance and at the time the award was made a fund of \$725,000 had been set up to meet it.

The St. Louis Southwestern extends southwest from St. Louis through southeastern Missouri and Arkansas to Fort Worth, Dallas, and other eastern Texas points. It operates through ownership, lease and trackage rights 1,776 miles of line, slightly less than half of which is in Texas.

The freight traffic handled during 1919 amounted to 1,140,459,526 ton miles or approximately 10 per cent less than that of either of the two preceding years. The passenger traffic showed a decrease of 18 per cent from that of 1918, although it was about 6 per cent greater than in 1917. Immediately following the termination of federal control all of the outside pre-war agencies were reopened and one or two new ones established, with the same personnel as in 1917, and an aggressive campaign for business was inaugurated under the spur of the necessity of operating without other assistance. The rapidity with which the road is coming back from a traffic standpoint is indicated by the fact that 599,802,003 ton miles of freight were handled during the four months of this year from March to June inclusive as compared with 319,593,055 for the same period in 1919 and 453,417,291 in 1918, the previous high water mark for this period in the history of the road. Similar recovery is being made in an operating way. Measured in terms of car mileage per day the performance on the lines north of Texarkana

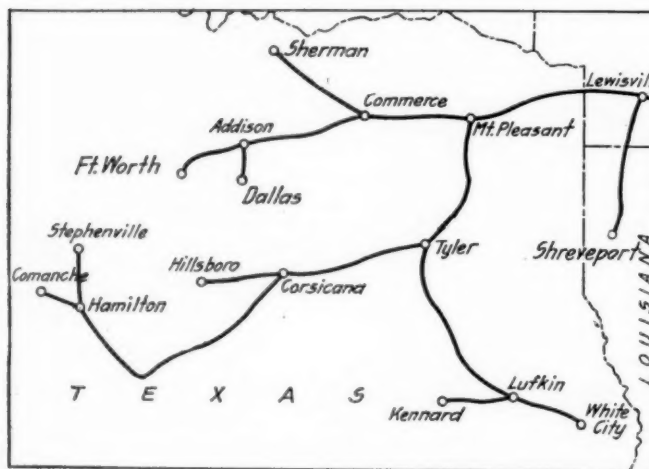
increased from 28.7 in July, 1919, to 35.1 in July, 1920, and on the lines in Texas from 13.1 to 28.9, while the mileage of tank cars on the entire road rose to 97.1.

Of particular interest has been the improvement in the morale of the employees. While the Cotton Belt has encountered the same change in the spirit of its men in the last three years that is found on other roads, the fact that the management saw fit to decline the federal guarantee exerted a favorable influence on them. Thus, while the switchmen at St. Louis and a number of the other large terminals went out with those on other roads it is indicative of the spirit permeating the organization that the employees at Pine Bluff, Ark., drove out of town agitators who were endeavoring to encourage the men at that point to leave the service. The Cotton Belt was able to keep its freight house in St. Louis open continuously during the switchmen's strike of last April, and to accept local and interchange freight freely, President Herbert wiring connecting lines on May 2 that the road was ready to handle all freight offered and that if their roads were unable to make delivery to the Cotton Belt, it would send its crews into their yards to get it.

The point of most active controversy with the Railroad Administration during the period of federal control concerned the expenditures for maintenance of way, the administration fixing the limit of expenditure at \$2,000 per operated mile of line. It was primarily the desire to be free from this restriction and to begin the work of rehabilitation at once that led to the decision to reject the government guarantee during the six months' period. The management at once undertook the work of rehabilitation aggressively, spending at the rate of \$4,236 per mile during 1920 (the expenditures for the last three months being estimated) or double the government allowance. In addition the budget for capital expenditures calls for the expenditure of approximately

The following shows the corporation income account for 1919:

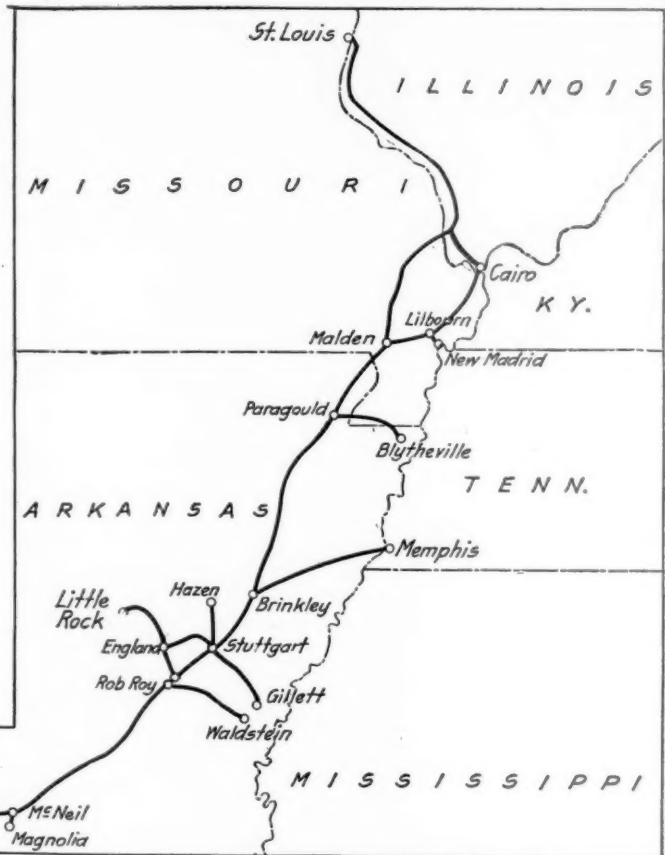
Standard return, tentative (as certified by the Interstate Commerce Commission) .....	\$3,910,914
Non-operating income .....	659,740
Gross income .....	4,570,653
Interest, rentals, etc. ....	2,597,776
Corporate organization expenses .....	164,658
Taxes, accruals and miscellaneous .....	462,310
Income balance .....	1,345,909



The St. Louis Southwestern

\$6,300,000, including 21 new locomotives and considerable quantities of new rail, ballast, etc. The following table shows the general results of the operation of the property under the government in 1919 and 1918.

	1919	1918
Average mileage operated .....	1,755	1,783
Freight revenues .....	\$15,821,318	\$14,365,854
Passenger revenues .....	4,492,096	4,910,251
Total operating revenues .....	20,661,163	19,588,761
Maintenance of way and structures .....	4,127,516	3,226,375
Maintenance of equipment .....	5,220,162	4,688,980
Traffic expenses .....	314,114	376,207
Transportation expenses .....	7,880,833	6,843,340
General expenses .....	789,959	705,713
Total operating expenses .....	18,332,583	15,840,615
Taxes .....	780,575	742,779
Railway operating income .....	1,543,822	3,003,064

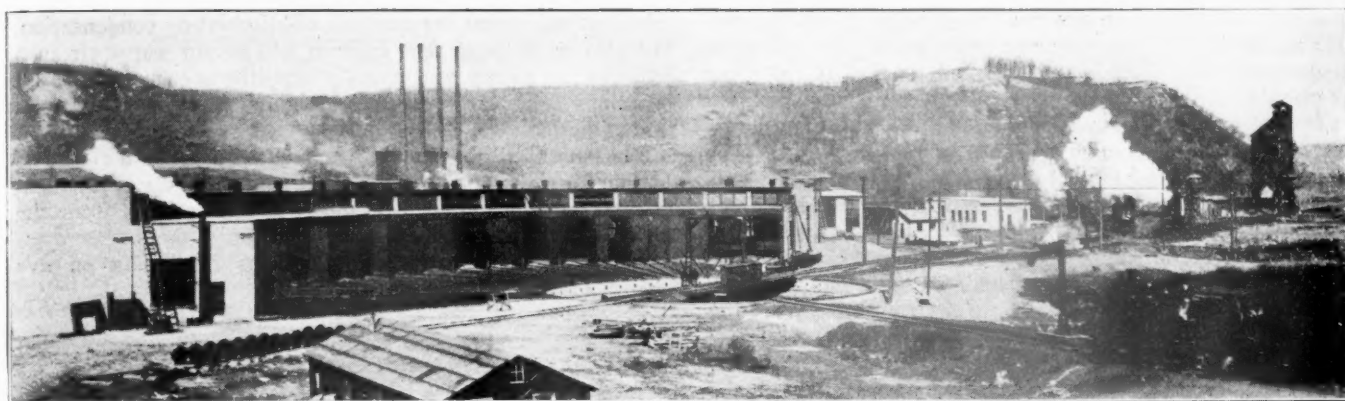


## New Books

*Engineering and Building Foundations, Vol. I. Ordinary Foundations*, by Charles Evan Fowler, consulting engineer, New York City, 6 in. by 9 in., 531 pages, illustrated, bound in cloth, published by John Wiley & Sons, New York City.

This book is the result of the author's decision to expand his previous work "Practical Treatise on Subaqueous Foundations" into three volumes on the occasion of its republication in a fourth edition. As the title indicates the first volume treats of the simpler foundation problems and accordingly matter contained in the earlier book relating to the more complex subjects has been withdrawn for use in the later volumes, while new chapters on the masonry for piers, abutments, retaining walls and culverts round out the subject. Volume I covers practically all engineering details relating to the construction of the substructures of bridges that do not involve the open or pneumatic caissons or elaborate dredging. It embraces both design and construction practice, going into considerable detail on such matters as cofferdam sinking, pile driving, removal of old piers, pumping, etc. In general the treatment is direct and analytical, but considerable space is given to detailed accounts of the methods used in building particular structures.

**THE RAILROADS AND BUSINESS.**—Every business man has his eye on the railroads today for first move in the direction of liberal for first move in the direction of liberal orders for equipment. That is his signal things are all right again.—*N. Y. Commercial.*



The Chicago, Milwaukee & St. Paul Roundhouse at North McGregor, Iowa, Has a Gypsum Roof

## Gypsum Tile as a Covering for Railroad Buildings

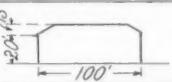
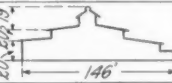

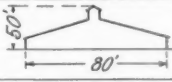

Low Conductivity, Resistance to Disintegration and Ease of Erection Commend This Material

By Curtis F. Columbia,  
Consulting Engineer, New York City

A ROUNDHOUSE has been described as a semi-circular structure with a questionable roof. It is a matter of common knowledge that engine houses have not kept pace with locomotive development and that atmospheric conditions in roundhouses are not conducive to satisfactory maintenance of the types of construction most commonly used. The high percentage of moisture present in the air aided

cables suspended from truss to truss are imbedded in a slab of gypsum which is poured on the job. The pre-cast tiles are manufactured in definite sizes and shipped to the building site ready for immediate erection.

The tiles are placed in units, without mortar, after which the joints are grouted with gypsum grout, consisting of one part unfibred gypsum cement plaster and three parts of

Railroad.	Location.	Size in Feet.	Floor Area Sq. Ft.	Gross Section.	Wall Area	Roof Area.	Per cent of Roof Area to Total Exterior Surface.
A.T.&S.F.	Topeka, Kan.	400'x100'	40,000		22,600±	44,400±	66%
C.P.R.	Angus	303'x146' and 303'x130'	84,200		30,100±	86,800±	75%
C.R.I.&P.	Silvis	465'x99' with 85' used as a brass furnace.	46,000		29,860±	38,000±	60%
N.Y.C.	Collinwood	80'x312'	25,000		14,608±	32,000	80%
L.&N.	South Louisville	400'x150'	60,000		30,000	68,800	45%

Principal Characteristics of Five Large Railway Blacksmith Shops

by the sulphurous and sulphuric acid occurring in locomotive flue gases encourages the decay of wood and the corrosion of steel. The effects are so severe that some roads prohibit the use of any rolled metal in the roundhouse superstructure while others have installed elaborate ventilating systems in an effort to improve the atmospheric conditions.

Gypsum, which is a relatively new material for roof decks, has had some of its earliest use in railway roundhouses. It is made from a specially prepared calcium sulphate rock and is reinforced with wire netting, iron rods or steel cables. Gypsum roof decks may be applied as poured roofs or as pre-cast tile. Each has its advantages. The poured-in-place roof is a somewhat unique construction in which steel

sand. As each tile is machine molded individually, the surface of the roof is practically smooth. Curbs under monitor or sawteeth sash and end walls of monitors or sawteeth are constructed of three-inch solid gypsum tiles, usually not reinforced with steel. The gutter fill is composed of gypsum and wood chips in a proper mix. When the tile, end walls and gutter fill are in place, a roof covering of any description or make may be applied immediately.

### Are Designed Similar to Reinforced Concrete

Gypsum tiles are designed and reinforced in accordance with the recommendations of the "Joint Committee" and specifications of the American Society for Testing Materials.

This specially prepared gypsum takes the place of the concrete aggregate and has developed maximum ultimate value in compression of from 3,300 to 4,000 lb. per sq. in. The pre-casting of the tiles in most cases insures surfaces that are true planes with a smooth finish and offer a finished surface for the application of all types of roof covering. The tile are easily cut and fitted for any roof requirements. This is of special interest in railway construction as the roofs of the majority of buildings have many irregularities to provide for ventilators, smoke stacks, vent pipes, trim, flashing, louvres, skylights, sawtooth and monitor sash, etc.

The light weight of gypsum tiles is most significant as the material from which they are made weighs but 77 lb. per cu. ft. Gypsum tile may be erected with great rapidity. With proper working facilities 300 to 5,000 sq. ft. may be laid daily. Erection is not hampered by freezing weather or the continuation of activities going on below the roof structure. An illustration of the speed of erection is exemplified in the construction of the Standard Steel Car Company's coach paint shop at Hammond, Ind., which was designed by the Austin Company, Chicago, and erected completely in 40 working days.

The presence of steam in the enginehouses makes high conductivity in roof construction objectionable because of the excessive condensation that will take place on the underside of the roof in cold weather. This has been particularly noticeable in some concrete roofs and has led in some recent

cant, not only from the question of eliminating condensation, but also in showing that gypsum will retain warm air in a building in winter and greatly simplify the heating of all buildings with large roof areas, thus effecting a material saving in fuel.

The question arises as to whether the area of the roof as compared to the total exterior area of a building is sufficient to warrant consideration of the roof construction from the standpoint of exposure. In this connection the author compiled the table of building dimensions from data on five



Comparative Amount of Heat Transmitted Through Various Building Materials

typical railroad blacksmith shops. This shows that the roof constitutes at least 65 per cent of the exposed surface of an industrial building of this type.

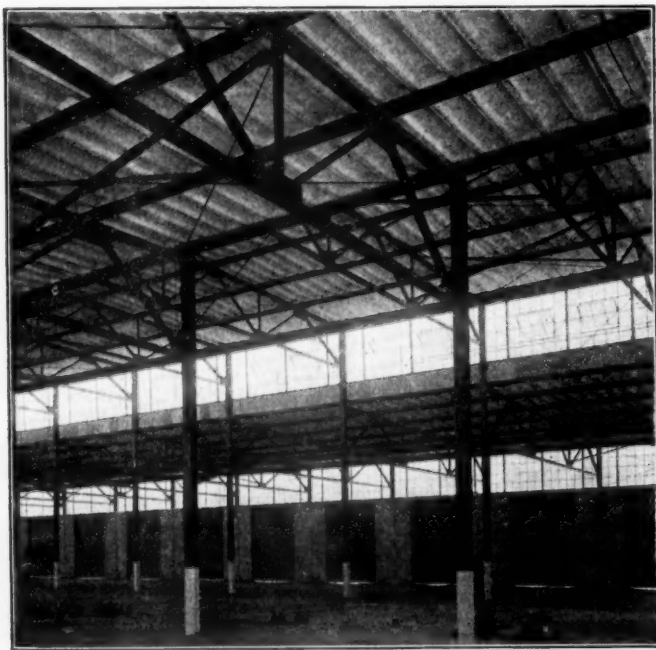
#### Results of Exposure Tests

When a gypsum tile roof was installed on the round-house of the Chicago, Milwaukee & St. Paul at North McGregor, Iowa, by the United States Gypsum Company it was arranged to use one panel of the roof for test purposes. After three years of continuous exposure to locomotive flue gases six slabs were removed to ascertain their condition. The reinforcing in the gypsum tile showed no signs of rusting or disintegration, and the steel appeared as bright and sound as when it was first placed. A black or sooty discoloration on the tile due to the smoke from the engine stacks did not penetrate into the slab deeper than the thickness of a thin piece of tissue paper.

It is further interesting to note that the Pittsburgh Plate Glass Company of Crystall City, Mo., has a gypsum tile roof over tanks used to dip the glass in a solution of muriatic acid and to date no disintegration has been observed. C. T. Clarke, manager of the charcoal division, E. I. Dupont DeNemours & Co., tested gypsum tile by immersing it in a steam bath for six weeks' constant application and then subjected the same tile for three weeks to the fumes of pyroligneous and acetic acid and finally submerged it for a period in hot water. The gypsum roof tile withstood all the tests to which it had been subjected.

Recently a large copper manufacturer in New Jersey tested a slab of gypsum roof tile to determine the effect of concentrated sulphuric acid. The tile was suspended in a five per cent solution of acid for 24 hrs. After this period of emersion, the liquid was allowed to evaporate, thus concentrating the acid. Examination of the tile showed no ill effects.

The question arises as to the effect of the moisture content of gypsum slabs owing to the fact that gypsum has the power of absorbing considerable quantities of water. To determine whether the absorption of water resulted in permanent ill-effects on gypsum tile, A. S. Ross, laboratory manager of the Milwaukee Coke and Gas Company, subjected a specimen of gypsum tile to steam, ammonia and tar vapor for a period of 10 days. The specimen was then dried in an oven for 48 hr. at a temperature of 105 deg. C. and finally suspended over a dehydrator for four months. At the end of this test, the tile showed no apparent deterioration. In view of the fact that gypsum roof tile is invariably protected by a waterproof covering and because designs in gypsum tile construction are based on the strength of saturated tile, the question of water absorption is of little consequence.



A Typical Shop Building Roofed with Gypsum Tile—Standard Steel Car Company Coach Paint Shop at Hammond, Ind.

designs to the use of the reinforced concrete-clay tile construction. Properly designed gypsum roof decks do not permit the formation of condensation because gypsum has such a low thermal conductivity factor that heat is not easily transmitted through the material. The low conductivity of gypsum has been determined by the United States Bureau of Standards, the Bureau of Yards and Docks, Underwriters Laboratories and others. The results of a test by G. F. Gebhardt, Armour Institute of Technology, Chicago, are shown graphically in the diagram where it is seen that three inches of solid concrete and one inch of cement tile are scarcely more effective as a barrier to heat than ordinary window glass. The results of this test are signifi-

# Labor Board Concludes Short Line Hearings

## Labor Representatives Demand Living Wage for All Employees and Request New Adjustment Boards

**H**EARINGS before the Railroad Labor Board on the demands of representatives of the employees of short line railroads for the extension of the wage scales created by Decision No. 2 of the Board were practically completed on November 24. On that date both the employees' and carriers' representatives presented their rebuttals, thus closing the presentation of evidence unless the Board calls for additional testimony. This, it is rumored, will be necessary before the case can be decided.

The progress of these hearings has been reported in the *Railway Age* of October 29 (page 747), of November 5 (page 786), of November 12 (page 837), and of November 25 (page 935). Practically all of the testimony presented from the beginning of the hearings until November 24 has been that of the representatives of the various short lines involved. The employees' representatives presented as their testimony the evidence submitted to the Board in the hearings which culminated in the Board's award of July 20. The carriers' representatives protested against accepting this testimony as evidence in the present case, however, their protests were overruled by the Board, and the hearings were continued, the carriers completing their testimony on November 22.

L. E. Sheppard, president of the Order of Railway Conductors, opened the employees' rebuttal by attacking the carriers' contention that the cost of living of employees on short lines is below that of employees on trunk lines, and that therefore there should be a differential between the wage scales paid for similar work. Mr. Sheppard said in part:

"We hold that the cost of living is only the basis and that after a living wage has been established, those who give service of an intellectual or supervisory character should receive additional compensation in accordance with the value of the service rendered and that the so called cost of living should be the minimum and should be applicable to those who perform only physical labor."

The remainder of Mr. Sheppard's testimony was devoted to answering the carriers' contentions that: first, the men are satisfied and are being paid adequately at the present time; second, that the roads cannot pay increased wages without going into bankruptcy and ceasing to operate, and, third, that the rates charged by the short lines cannot be raised without driving away traffic. In answer to the first contention, Mr. Sheppard said that the men had importuned their representatives to help them and that discrimination against the short line employees in train, engine and station service was prevalent. In answer to the second contention he said: "If railroads require labor they should pay the going rate for it." In answer to the third contention, he said: "We have no desire to see any road close operations, but a road should be closed unless it can continue to operate as do other lines and it should not expect to continue to operate at the expense of the laborer."

Mr. Sheppard closed his testimony by urging that conductors be granted the same rates of pay granted to conductors on the trunk lines on the theory that labor should not be called upon to accept less when the owners pay the going rate for everything else necessary for the operation of their roads.

Timothy Shea, representing the Brotherhood of Locomotive Firemen and Engineers, followed by attacking the carriers' contention that there is no real grievance existing between the employees and the officers of many of the short lines.

In support, he presented correspondence to show that representatives of the employees had followed the procedure prescribed in the Transportation Act as necessary to bring wage disputes properly before the Board.

Regarding labor's attitude toward the Transportation Act, Mr. Shea said: "Our criticism of the Esch-Cummins Bill was because the law guarantees to investors in railroads a minimum return of five and one-half or six per cent on the aggregate value of the property of the carriers. The law also guaranteed to the railroads compensation for six months, March 1 to September 1, under the three year test period. The railroads were also returned to private control and operation with all their resources unimpaired. On the other hand, no measures were provided in the Act for the protection of railroad labor, except that wages could not be reduced during the first six months' period. In other words the human element was ignored all the way through."

The remainder of Mr. Shea's testimony was devoted to the presentation of many long quotations from court decisions involving rate controversies, from arbitration board decisions and from other tribunals involving wage controversies. A large part of this testimony was designed to answer the contention of the carriers' representatives that their ability to pay increased wages and still operate should be a factor in arriving at a decision in this case.

The basis of Mr. Shea's argument was similar to that of Mr. Sheppard; that inasmuch as the short lines had to pay the going rates for their equipment and materials, they should pay the going rate for their labor. In addition, Mr. Shea brought out several facts to show that the work of the employee of the short lines is far less favorable than that of the employee of the trunk line, i. e., their earning capacity is restricted, promotions are slower, and they are required to live in small towns where the living conditions are less favorable.

In regard to the cost of living, Mr. Shea presented voluminous statistics from various sources to show that living costs had not materially decreased. In closing this part of his testimony, he cited the fact that "lower prices will greatly increase the profits of the railroads." Part of any such saving should be applied toward increasing wages, he said, "until an American standard of living for all railroad employees is attained, the remainder to be used in reducing transportation rates to the public."

Mr. Shea was followed by W. N. Doak, representing the Brotherhood of Railway Trainmen, who confined his remarks to certain provisions of the Transportation Act and their application to this case.

Mr. Dougherty, representing the Brotherhood of Locomotive Engineers, and B. M. Jewell, representing the Federated Shop Crafts, followed Mr. Doak, their testimony dealing mainly with: first, the relation of wages to the cost of living; second, the hazards of employment; third, the training and skill required; fourth, the degree of responsibility; fifth, the character and regularity of employment, and, sixth, inequalities in wages and working conditions. In every case the evidence was such as to show that the work of employees of the short lines was comparable to that performed by men in similar positions on larger roads. In addition, Mr. Jewell presented a lengthy statement regarding the cost of living prepared by a new publicity and research bureau created by the Railway Employee's Department of the American Federation of Labor.

The testimony so far presented had practically covered the

employees' main contentions, and therefore the remainder of the testimony submitted pertained largely to the wages and working conditions of particular classes of short line employees. Mr. Brown, representing the Order of Railroad Telegraphers; Mr. Easty, representing the Brotherhood of Railway Clerks, Freight Handlers, Express and Station Employees; J. G. Luhrs, president of the American Train Dispatchers Association, and J. C. Smock, representing the United Brotherhood of Maintenance of Way Employees and Railway Shop Laborers, presented testimony of this character.

S. S. Ashbaugh, representing the American Short Line Railroad Association, closed the hearings with a general statement on behalf of the short line carriers. Mr. Ashbaugh's remarks were based upon the constitutionality under prevailing conditions of any decision in this particular case granting short line employees increased wages. In presenting the position of the short lines, he said, "I object on behalf of all the lines represented by the American Short Line Railroad Association, to all the proceedings these claimants in name, or pretended claimants, have introduced here." In support of his contention that the Board could not render a decision in this case, he cited numerous precedents to show that legally private property cannot be taken away from one party and given to another without "due process of law." This "due process of law" he contended had not been followed in this case and that therefore the Board could not afford to render a decision which would bring it into disrespect or one that could easily be reversed by court action. In conclusion, Mr. Ashbaugh urged the Board to confine its "decision" in this case to a statement of what constitutes "due process of law" and of the reasons why a wage award cannot be made in any case developed and conducted as this one has been.

On November 29, a closed hearing was held at the request of leaders of the various railroad brotherhoods. Precautions were taken to exclude representatives of the press, however, the labor leaders appearing before the Board at this session were frank regarding the testimony presented to the Board and in published interviews stated that they had appealed to that body to adopt some plan whereby disputes between the railroads and their employees other than wage differences might be settled. According to G. W. W. Hanger, a member of the Board and its chairman of publicity committee, the hearing was held at the request of the labor leaders "to discuss general conditions." Practically all of the leaders of the larger railroad brotherhoods attended the hearing and many were outspoken in their demand for the establishment of national boards of adjustment which could pass on disputes over working conditions.

There is some question as to the jurisdiction of the Labor Board to enter into this controversy. The establishment of boards of adjustment is not mandatory under the terms of the Transportation Act. It is true, however, that some machinery must be created to take care of the large number of disputes constantly arising and if the employees and the railroads cannot agree upon their formation, it may be necessary for the Labor Board to expand in order to handle grievance cases as well as the appeal cases which it is now handling.

NEWFOUNDLAND'S NARROW-GAGE LINE of 960 miles, running through the period of the war without government aid, has been forced to call on the colony for help in post-war readjustment. The railway administration has been placed in the hands of a joint commission of seven, of which the government has a majority of the members. The commission, equipped with \$1,000,000 of colonial funds, has been set the task of working out the salvation of a railway system which before the war lost an average of \$100,000 a year, and in the last five years has had to meet without advance in rates an increase in expenses. As one of its first problems, the commission is faced with a demand for further increases in wages ranging from 20 to 30 per cent.

## Lowest Rail Consumption In 22 Years

THE CONSUMPTION of rails in the United States in 1919, based on statistics issued by the American Iron and Steel Institute, was less than for any year since 1897. This figure, which includes rail purchases for all purposes, has been obtained from actual statistics on production, imports and exports and is 1,568,402 tons. This is to be compared with the consumption of 2,096,060 tons for 1918, 2,440,755 tons for 1917 and the maximum figure of 3,654,794 tons for 1906. The complete tables, which cover the years 1874 to 1919, inclusive, appear below.

APPROXIMATE CONSUMPTION OF RAILS, 1874-1919.

Years.	Production—Gross tons.			Imports.	Exports.	Approximate consumption.
	Iron.	Steel.	Total.			
1874....	521,848	129,414	651,262	96,706	1,122	748,846
1875....	447,901	259,699	707,600	17,364	1,080	723,884
1876....	417,114	368,269	785,383	256	3,180	782,459
1877....	296,911	385,865	682,776	31	6,647	676,160
1878....	288,295	499,817	788,112	9	8,354	779,767
1879....	375,143	618,850	993,993	39,417	3,066	1,030,344
1880....	440,859	864,353	1,305,212	259,543	958	1,563,797
1881....	436,233	1,210,285	1,646,518	344,929	611	1,990,836
1882....	203,459	1,304,392	1,507,851	200,113	3,220	1,704,744
1883....	57,994	1,156,911	1,214,905	34,801	2,308	1,247,398
1884....	22,821	999,367	1,022,188	2,829	6,034	1,018,983
1885....	13,228	963,750	976,978	2,189	7,757	971,410
1886....	21,142	1,579,395	1,600,537	41,587	2,644	1,639,480
1887....	20,591	2,119,049	2,139,640	137,830	549	2,276,921
1888....	12,725	1,390,975	1,403,700	63,037	6,908	1,459,829
1889....	9,159	1,513,045	1,522,204	6,217	9,325	1,519,096
1890....	13,882	1,871,425	1,885,307	204	16,947	1,868,564
1891....	8,249	1,298,936	1,307,176	253	11,239	1,296,190
1892....	10,437	1,541,407	1,551,844	347	7,982	1,544,209
1893....	6,090	1,130,368	1,136,458	2,888	19,876	1,119,470
1894....	4,674	1,017,098	1,021,772	300	13,556	1,008,516
1895....	5,810	1,300,325	1,306,135	1,447	15,599	1,291,983
1896....	4,347	1,117,663	1,122,010	7,796	73,131	1,056,675
1897....	2,872	1,645,020	1,647,892	415	148,221	1,500,086
1898....	3,319	1,977,922	1,981,241	200	301,903	1,679,538
1899....	1,592	2,271,108	2,272,700	2,134	277,714	1,997,120
1900....	695	2,384,987	2,385,682	1,448	361,619	2,025,511
1901....	1,730	2,872,909	2,874,639	1,905	318,956	2,557,588
1902....	6,512	2,941,421	2,947,933	63,522	67,666	2,943,789
1903....	667	2,991,810	2,992,477	95,555	30,837	3,057,195
1904....	871	2,283,840	2,284,711	37,776	416,250	1,906,237
1905....	318	3,375,611	3,375,929	17,278	295,023	3,098,184
1906....	15	3,977,872	3,977,887	4,943	328,036	3,654,794
1907....	925	3,632,729	3,633,654	3,752	338,906	3,298,500
1908....	71	1,920,944	1,921,015	1,719	196,510	1,726,224
1909....	none.	3,023,845	3,023,845	1,542	299,540	2,725,847
1910....	230	3,635,801	3,636,031	7,861	353,180	3,290,712
1911....	234	2,822,556	2,822,790	3,414	420,874	2,405,330
1912....	none.	3,327,915	3,327,915	3,780	446,473	2,885,222
1913....	none.	3,502,780	3,502,780	10,408	460,553	3,052,635
1914....	none.	1,945,095	1,945,095	22,571	174,680	1,792,986
1915....	none.	2,204,203	2,204,203	78,525	391,379	1,891,349
1916....	none.	2,854,518	2,854,518	26,299	540,828	2,339,989
1917....	none.	2,944,161	2,944,161	9,263	512,669	2,440,755
1918....	none.	2,540,892	2,540,892	8,705	453,537	2,096,060
1919....	none.	2,203,843	2,203,843	17,008	652,449	1,568,402

THE DINING CARS of the New York Central Lines serve 10,726 persons every day. Recent advertisements state that the New York Central Lines purchase 2,015,000 lb. of meat a year for consumption in their diners. There are at present 154 dining cars in service and 12 new dining cars, costing approximately \$46,000 each, will soon be ready for use. The number of waiters who serve the traveling public on these lines is 884, and in the course of a year 42,993 bu. of potatoes are bought; 235,392 lb. of butter; 720,000 loaves of bread; 365,475 lb. of chicken; 371,193 lb. of sugar; and 324,060 dozen eggs. In the compact kitchens are 651 busy cooks. And the unbelievable sum of 14,076,108 pieces of linen are laundered every year. Every employee in the New York Central dining-cars is physically examined at the time of his engagement and at stated intervals thereafter, and must pass exacting tests.

# Threatening Purposes of Railroad Labor Leaders\*

## Far-Reaching Results of Administration's Easy Policy—Local Boards Essential to Discipline

By W. W. Atterbury  
Vice President of the Pennsylvania Railroad

GENERAL ATTERBURY stated the well known policy of the Pennsylvania toward its employees and set forth his own personal platform on the general labor question; sketched the policy of the Government in dealing with railroad employees during the period of government operation and the efforts of the brotherhood leaders to perpetuate that policy; and then went on:

Remembering the tactics adopted by certain labor leaders which so successfully stampeded Congress into enacting the Adamson law, chiefs of 16 railroad labor unions last winter sought to compel the same body to pass a railroad law based on the Plumb Plan.

Failing there, they made a determined effort, through the so-called Anderson amendment to the Cummins-Esch Bill, to continue centralized enforcement of discipline as it was during government operation. Congress refused their demands, and the Transportation Act, as passed, established a decentralization policy and restored the enforcement of discipline to the individual railroads, but to guard against interruption of transportation by strikes, established the United States Labor Board, made up of equal representatives of railroads, the employees and the public.

Frankly dissatisfied with this plan because the public, which eventually pays the bills, is given a hand in deciding these matters, labor chiefs are seeking to force the railroads to concede what Congress refused to give them.

Their plan for national boards of adjustment should be considered in connection with their pending demand for working agreements with all of the different crafts, which will be national in scope and is a logical step in their policy of standardization and the nationalization of the railroads. This matter is of particular interest to the public. Any lessening of discipline enters seriously into the safe and efficient operation of the railroads.

But the public's good is threatened in even more vital manner, for the plan means the "Closed Shop" on the railroads and, in view of the intimate relationship now existing between the various organizations of railroad workers, will put the transportation lines completely in the hands of "The One Big Union." Such a condition is fraught with the greatest danger to all other industries.

With all railroad workers completely under the domination of one organization, it can compel the granting of the demands of its members who may be employed elsewhere. Under threat of a complete suspension of transportation the country over, or affecting one branch of industry, manufacturers and railroad managers will be at the mercy of the union chiefs. All production may continue or cease merely at their word. The efforts of the organizations to have the Anderson amendment passed were for the express purpose of perpetuating the national boards of adjustment. Congress did not pass this amendment.

### Present Status—Contest Over National Agreements

The organizations will naturally use every available means to carry out their expressed purpose of having these so-called national agreements perpetuated. On the other hand, the railroads have been and are preparing their arguments

against the perpetuation of these national agreements, endeavoring to illustrate each of their arguments with actual examples, in order that the labor board will be given full notice of the consequences of these agreements, also the resultant excessive costs, for which the users of the railroads must provide the necessary funds.

Each rule in each agreement is being analyzed, with an effort to point out whether it is workable or not, and the effects thereof, also the different conditions on the various railroads, and the arbitrary application of the rules regardless of the results therefrom.

Certain rules appear in all the agreements, notwithstanding that the conditions under which they will apply are entirely different. Other rules are restrictive and result in handicaps upon the management in the distribution of working forces; others necessitate the use of so-called skilled men for performing work that requires no skill and, therefore, entail an economic waste.

The unions refuse to join local boards of adjustment, though the railroads have been ready to join in their formation, as provided by Section 302 of the Transportation Act; or to adopt any other plan which may be agreed upon for bringing the two parties together *on the ground* or at the point of inception of the difficulty, in order that as many as possible of these controversies not involving wage increases, may be settled between the parties immediately at interest, and thus avoid burdening the United States Railroad Labor Board unnecessarily with matters which may be adjusted between the parties themselves. The employees, however, have insisted that the boards of adjustment shall be national in character, but without public representation. These diverse opinions have delayed the formation of boards of adjustment.

### Maintenance of Authority Is at Stake

In the organization of the boards of adjustment under federal control all the representatives of the employees appointed to the boards were selected from members of the unions. Under such an arrangement a non-union man would hardly believe that he would receive impartial treatment from the union representatives on any board of adjustment as against a union man, and this would inevitably tend to produce the "closed shop."

Local boards of adjustment, as proposed by the railroads, would afford the railroad officers opportunity to renew their personal contact with their own employees, and thus establish proper relationship between the employees and the officers of the railroads.

If the authority is taken from the general manager to handle questions arising on his individual property, whether on interpretations, or schedule rules, or on matters of discipline, it will not be possible for him to efficiently and economically conduct the operation of the property entrusted to him.

### Unions Seek Nationalization of Roads

The organizations in attempting to perpetuate these so-called national agreements, and, further, to form national boards of adjustment for all railroads, are clearly endeavoring to bring about the nationalization of all the railroads and unification of all properties in so far as wages, working condi-

\*Abstract from a paper prepared for the National Industrial Conference Board.

tions, discipline, etc., are concerned, ignoring the rates and working conditions of analogous employees of outside industries at various local points; and their demands are calculated to fasten the "closed shop" not only upon the railroads, but eventually upon the industries of the country. If the railroad managements should now falter or yield, the breach which will result in the front presented by the forces of the "American plan"—the "open shop"—will be so wide and deep as to be irreparable.

Congress has said that the railroads and their men may, by agreement, establish boards of labor adjustment for the settlement of all controversies not directly involving wage rates. In the words of the law, these boards "may be established by agreement between any carrier, group of carriers, or the carriers as a whole, and any employees or subordinate officials of carriers, or organization or group of organizations thereof."

Under this section of the Transportation Act, the labor leaders are demanding that such boards of adjustment be *national* in scope. The railroads are holding out for boards local to each road, or each system under one management, or what amounts to the old method of deciding matters between the officers and committees of employees on any one road.

If this demand for national boards of adjustment stood alone, it would be serious enough, but as the "first step" in a series of carefully planned campaigns for labor union control and operation of the railroads, and the other essential industries and utilities, it becomes a matter of paramount importance.

#### Menace of "One Big Union" for

##### All Forms of Industry

National boards of adjustment, formed by agreement between the carriers as a whole and their employees as a body, could only be found representative, on the men's side, of organized workmen. None other might hope to have a voice in their forming, or the faintest hope of real representation.

This at once makes it necessary not only that all employees must be members of unions, but that the unions must be organized nationally, and that these national unions must, in turn, be merged into one grand organization, for the purpose of agreeing upon the national boards, if for no other reason. Even now, the self-styled "Associated Standard Recognized Railroad Labor Organizations," composed of sixteen national organizations, having as their spokesman an officer of the American Federation of Labor, and many of their units being also constituent parts of the Federation, are conducting the negotiations on behalf of the railroad employees. The "One Big Union" is, therefore, for the moment at least, an accomplished fact upon the railroads. This "One Big Union" is but another name for the Plumb Plan League, the president of which is the president of one of these national unions, and the other officers of which are, as far as officers reach, the heads of the various unions.

#### Four Threatened Hazards

If the union leaders succeed in carrying out their plans, we shall very shortly find:

1. That the railroad systems of the country will be dominated by the brotherhoods and the unions affiliated with the American Federation of Labor, with power not only to enforce their demands by stopping the transportation of the country, but also, through affiliation with the workers in other industry, to stop production in all essential lines, whenever they feel so inclined.

2. That all discipline, with the power to employ or discharge men, will be lodged in national tribunals likewise dominated by the union organizations, with the managements, minus authority, helpless to change or improve conditions.

3. That wages, hours and working conditions, of railway

employees will be uniform throughout the country, regardless of varying conditions in the different localities, the amount of work performed by different individuals, or the relative efficiency of that work.

4. That the public will be without voice in determining most of the questions at issue, and without means of blocking the insidious plans of the labor leaders for Soviet operation of the railroads under the Plumb Plan.

There may be a natural tendency on the part of some railroads complaisantly to yield to the first of the demands under this program—for national boards of adjustment, upon the plea that the Federal Administration gave the men such boards (Boards of Adjustment Nos. 1, 2 and 3); but the real issue is in the next step—the demand for national agreements.

The unions are claiming—and hoping—that the railroad labor board will be swamped with grievances from all parts of the country unless these adjustment boards are created at once, and naturally the grievances are already beginning to come in. Neither the public at large, nor its three representatives on the labor board, will be in a position to judge the full import of the controversy until the board proceeds with its regular order of business, and takes up the deferred question of working conditions, which is always an integral part of the wage question, and which has been before it since last spring as a dispute under Section 301 of the Transportation Act. It will be the tactics of the unions to postpone the hearings on this question in the hope that by loading up the board with minor grievances they will be enabled to retain the existing status without letting the public know what is going on.

#### The Labor Board's Responsibility

I doubt if the board realizes what a great responsibility it assumed when it was ruled in the recent wage award that all working conditions on all railroads must remain in effect exactly as they existed prior to March 1, notwithstanding the fact that all agreements covering such matters ceased to be effective on that date; nor the great responsibility assumed in continuing this agreement, when the members have not heard the evidence from either side to indicate what this action or inaction may mean to the public. It is the avowed purpose of the union leaders to fasten the Plumb Plan upon the country if they can, and they are already importuning the labor board to perpetuate the so-called national agreements.

The significance of this effort may not be understood by the members of the board, and it devolves upon them to see to it that no further steps are taken in this direction until full light has been turned upon the whole subject. Chambers of commerce or boards of trade desiring to be heard in this controversy, should openly and vigorously press that desire through such channels as promise to be most effective.

#### The Coming Readjustment

The handwriting on the wall is clear. Readjustment of all valuations is proceeding rapidly. With that must come readjustment of wages, necessitated by economic forces beyond our control. On this rock the split will come between the radicals and conservatives in labor's ranks. Railroad wages, artificially established by the labor board, will remain at their present high standards, while all other labor, through the workings of economic law, will gradually reach a level commensurate with, and directly proportionate to, the then economic conditions, with the usual short variables as between good and bad times. Those employed in outside industry will be the first to demand a reduction in the wage of railroad employees. A split will at once follow in the organizations themselves. The leaders, unusually intelligent men, will recognize the trend of the time, and must inevitably endeavor to meet the situation by acquiescing in an adjustment which will be measurably comparable with the then wage scale of the country.

And then the wickedness of their previous conduct will be recognized by these officers themselves. Having done everything within their power to break down discipline on the railroads as between the officers and their men, and to destroy respect for official authority, it need hardly come as a shock to them, when they attempt to control their own men, to find that the very spirit of insubordination which they have fomented against the railroad officers should be in turn exerted against their labor organization officers.

The strength of the American Federation of Labor in the past has been that local organizations were permitted to handle their own matters locally. No attempt has ever been made by it to exert its economic strength in a nation-wide coercive movement.

I have no fight with organized labor so long as it does not bring about the "closed shop," advocate or practice sympathetic strikes, act to limit production, nor undermine discipline. I have every desire to see its existence healthy and normal. Within reasonable limits it is a healthy spur to bring about fair conditions as between employer and employee. When, however, it attempts to nationalize industry, and in effect set up a super-government, and a small minority of the total population attempts to coerce the whole, it becomes a menace to our civilization. This is what is in progress at the present time with the railroads.

## New Department of Short Line Association Negotiates Larger Divisions

WASHINGTON, D. C.

THE AMERICAN SHORT LINE RAILROAD ASSOCIATION has completed the organization of its traffic department, under the supervision of Vice-president L. S. Cass, by the appointment of three traffic managers to represent the association and its members in the Official, Southern and Western Classification territories. R. A. Belding, formerly of the traffic department of the Chicago Great Western, has been appointed traffic manager for Official territory with office at Washington, D. C. J. A. Streyer, formerly manager of the Macon & Savannah, has been appointed manager for Southern territory, with office also at Washington, and F. C. Reilly, formerly freight traffic manager of the St. Louis & San Francisco, has been appointed traffic manager for Western territory, with office at Chicago. James Berlinget, manager of the labor department of the association at Chicago, having been given a leave of absence on account of ill-health, Mr. Reilly will also have charge of the Chicago office.

The traffic department of the association had previously organized a tariff bureau at Washington in charge of I. T. Hanson, assistant to the vice-president.

One of the important functions of the traffic department is to assist the short lines in their negotiations with the trunk lines for better divisions of joint rates. Bird M. Robinson, president of the American Short Line Railroad Association, had asked the Association of Railroad Executives to appoint a traffic manager to join the traffic department of the short line association in negotiations on the question of divisions. This plan was considered impractical by the executives but the chairmen of the traffic committees of the three classification territories, Benjamin Campbell for the Official, C. R. Capps for the Southern and C. G. Burnham for the Western, were instructed to take up with their committees the question of divisions with short lines in the respective territories "in a broad spirit" and to "make an earnest effort to arrive at a basis of divisions that can be accepted by the individual trunk lines and the individual short lines."

The short lines have been advised by their association to take up the question of divisions first with their connecting lines, and the traffic department will assist them in present-

ing their cases. In case of a failure to agree negotiations will be undertaken by the territorial traffic managers with the traffic committees of the trunk line roads in an effort to reach a satisfactory arrangement without the necessity of an appeal to the Interstate Commerce Commission.

The short line association was largely responsible for the language of the Transportation Act giving the Interstate Commerce Commission complete power to prescribe the divisions of joint rates but after the passage of the law negotiations were opened with the Association of Railway Executives for the purpose of bringing about an agreement for better divisions for the short lines in as many cases as possible without the necessity of filing complaints with the commission. In a letter to Chairman Cuyler of the executives' association, President Robinson of the short line organization said in part:

"The short lines of the country have heretofore originated and now originate and deliver to the main line carriers, in the aggregate, a very large volume of traffic, but notwithstanding that fact they have suffered seriously for the want of adequate revenue. The principal difficulty in that respect is that they have not received fair and adequate divisions of the joint earnings.

"Heretofore the traffic managers of the main line carriers have, by the strong-arm process, arbitrarily determined the division of the joint rates and, as a rule, have appropriated unto their own lines the major portion, leaving to the interested short lines the remainder, regardless of conditions.

"In most instances, divisions thus made were unfair and unjust to the interested short lines and caused constant and ever increasing irritation and ill-feeling on their part.

"Congress recognized and understood to a greater extent than any other governmental body the necessity of protecting the short lines, and inserted in the Transportation Act a number of provisions that were intended to insure just treatment of that class of roads. Among other things, Congress specifically provided that the Interstate Commerce Commission should have full and complete power to make division of joint rates, and for that purpose it incorporated a definite rule fixing a basis which the commission is to use when making divisions. This act of Congress terminated the strong-arm process and substituted therefor a governmental agency to act on that question.

"Promptly after the Transportation Act became a law, many of the short lines appealed to this association to immediately file complaints with the commission, asking it to grant to them substantial increases in the divisions of the joint revenue in which they were interested. We advised all such applicants and all other short lines to refrain from filing any complaint with the commission pending the decision of the commission in the advance rate case, and in the meantime to take up the question of the desired increase in divisions with their connecting lines. So far as we know, all of the short lines accepted our advice and refrained from filing complaints with the commission, and we are advised that a great many of them attempted to secure from their connecting lines the desired increase of divisions. Many of the roads that made such an attempt advise us that they have not been able to accomplish any result; that in practically all instances the traffic departments that were approached have refused to concede anything.

"The time has now arrived when the question of a fair and equitable division of joint rates and the establishment of through routes and joint rates must be settled. A very large number of the short lines are calling upon this association to prepare complaints in their behalf and to file them with the Interstate Commerce Commission. They insist that these steps must be taken without further delay for the reason that they are losing money and if they do not obtain relief immediately upon the termination of the government guaranty

on the first of September, they will certainly become bankrupt.

"In view of these facts, we must act. If we do not, the interested lines will proceed by employing attorneys who devote their time to fighting the railroads before the interstate and other commissions. Under the circumstances, this association cannot consistently delay longer. If we adopt the plan of filing individual complaints, there will possibly be as many as from 400 to 600 suits, and I fear that such action will result in great injury to the carriers as a whole. Suits of that character cannot be instituted and conducted without creating ill-feeling as between the officials of the interested lines, and the washing of the dirty linen of the carriers before the public will almost certainly result in injury to all concerned. I am, therefore, quite anxious to avoid that procedure if it can be done.

"If we find that the matter cannot be promptly adjusted in any other way and we cannot obtain for the short lines their equitable and legal rights, we will ask the commission to create a *Bureau of Interline Divisions*, for the purpose of considering as expeditiously as possible any and all complaints on the question of divisions, through routes and joint rates."

The resolution adopted by the executives declared that "inasmuch as government guarantees no longer exist and rates have been advanced so that theoretically the railroads are to be self-supporting, prompt action be taken and the matter not allowed to drag."

#### The New England Situation

The current issue of the Bulletin published by the short line association has an editorial commenting on the efforts being made by the New England lines to obtain larger divisions in part as follows:

"The question of the division of joint rates has been precipitated before the Interstate Commerce Commission at a time, in such a way, and by parties, that is surprising, and we fear may prove to be seriously detrimental to the interests of the short line railroads. The trunk roads of New England have filed with the Interstate Commerce Commission a complaint asking for \$25,000,000 from the roads west of the Hudson river as an increase in their divisions, and have made 186 members of this association parties defendant.

"We have no doubt but that the condition of the majority of the roads in New England is bad—some of them very bad—and we earnestly hope that some plan can be adopted which will afford them necessary temporary relief. We will be glad to aid in any legal or equitable way that we can to accomplish that result, but we cannot permit that sympathy and good will to interfere with our duty to protect the rights of the members of this association.

"The condition of a great majority of the members of this association is bad; in most cases it is much worse than that of the New England roads, hence all such members must not only have an opportunity to be heard, but they are entitled to have adequate time in which to prepare their answers and not only make proof as to their own condition, but should circumstances force it, to very *carefully examine* all of the evidence presented by the New England lines and by all other lines.

"The law fixes the cost of the service, not first come, first served, as the basis for the division of joint rates, and it is apparent that the commission cannot ascertain the cost of the service on the numerous roads interested, except after very full investigation and consideration.

"Short line railroads that require an increase in their divisions are especially interested in the case presented by these New England roads, particularly such lines as are located in the Official Classification Territory, for the reason that if the commission grants the prayer of the complainants, it may decrease the already inadequate divisions of such short lines."

## Coal Priority Order Vacated

WASHINGTON, D. C.

BECAUSE of the general improvement in the coal situation, brought about by the recent large production of bituminous coal, the Interstate Commerce Commission on November 27 vacated, effective at midnight on November 29, its Service Order No. 20, the order giving to bituminous coal general preference in the use of open-top cars east of the Mississippi river.

The commission said in explanation that the emergency which occasioned the issuance of the order had been "measurably relieved." On November 24 the commission had also set aside and vacated its Service Order No. 21, which provided for the preferential assignment of coal cars for public utilities and public institutions in necessitous cases upon authorization by the commission, saying that the emergency "has in general been measurably relieved."

The cancellation of Order No. 20 leaves in force no priorities except Service Order No. 19, which gives priority in car supply and transportation to certain coal commandeered by the Navy Department from mines in Pennsylvania and Maryland, which was not based upon any transportation emergency, but on a certificate issued by the President under the war power, to help the Navy get its coal at a lower price.

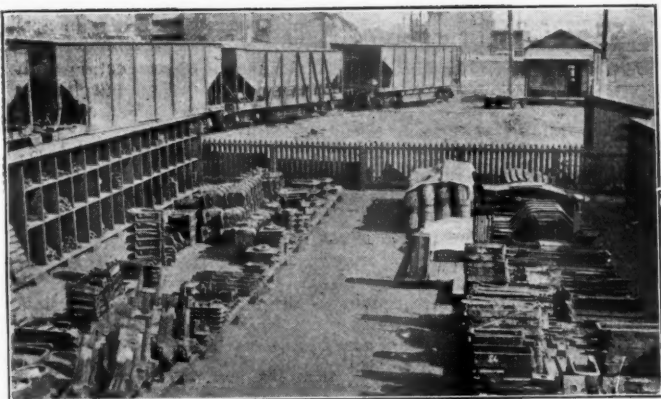
The only other service order now outstanding is No. 18, which governs the assignment of cars for railroad fuel.

The commission also issued a special permission order authorizing the carriers to cancel, on one day's notice, the emergency reassigning rules applicable on all freight in open top cars and on coal and coke in all cars, which were authorized by special permission on August 9. In a letter to Daniel Willard, chairman of the advisory committee of the Association of Railway Executives, Chairman Clark of the commission said that the emergency which prompted the authorization of the special rules has in large measure been passed, as evidenced by the cancellation of the priority order, and that he was authorized to recommend to the roads that the rules be cancelled at the earliest practicable date. Mr. Clark said it was admitted by all concerned that the rules were emergency measures which ought to be abated with the passing of the emergency, and that the commission assumed that its recommendation for their cancellation would be recognized by the carriers, thus avoiding formal complaints against them "which would certainly be filed and would perhaps be difficult to defend."

Under Service Order No. 20 and the previous orders of which it was a modification, coal has been given almost a monopoly in the use of open top cars since the latter part of June, although under permits and amendments nearly 200,000 cars had in recent weeks been released from the operation of the order.

#### Coal Production

The production of soft coal during the week ended November 20 dropped back below the 12,000,000 ton mark. The total output is estimated at 11,770,000 net tons, the lowest in any full time week since that of October 2. The bulletin of the Geological Survey says the cause of the depression is not yet entirely clear. Production of bituminous coal during the first 276 working days of the year has been 488,304,000, which is about 37,000,000 tons behind 1918, but within 5,000,000 tons of 1917, a year when production about equalled consumption. During the week of November 13 the loss of full time output on account of transportation disability is placed at 19½ per cent. The cumulative lake movement for the year up to November 20 now stands at 22,274,000 tons, which is about 7,000,000 tons behind 1917, but almost equal to the 1919 movement.



Storage of Car Repair Material With and Without Proper Facilities



## The Organization of a Strong Service of Supply\*

### Policies Pursued in the Purchasing and Distribution of Materials on the Western Maryland

**S**ELECTION OF MATERIALS with a view to their ultimate cost presents in many respects the most difficult problem with which the purchasing agent is confronted. First cost is *not* the only consideration with any purchasing agent having the true interests of his company at heart, but it is essential that he have sufficient evidence at hand to warrant the payment of a premium for any particular brand or specialty. It is of the greatest importance that the relative merits and ultimate efficiency of various materials be established by reliable tests and close observation. The fact that the general purchasing agent of the Western Maryland was formerly identified with an industrial concern dealing in high grade railway supplies may account in part for the very broad policy adopted with respect to the purchase of materials on the basis of quality and ultimate cost.

#### Selection of Materials

Instructions have been issued by the president of the Western Maryland that all tests of material, whether laboratory or service, must be arranged in conjunction with the general purchasing agent who is expected to work in close co-operation with the heads of various departments to determine: *first*, why the test should be made and, *second*, what results must be obtained. The general purchasing agent is expected to obtain information from the manufacturer as to the claims for superiority of the device or article, price, terms, etc. Before commencing any service test, the matter is thoroughly discussed with representatives of the department by which the material will be used with a view to determining that the test is necessary and can be conducted in accordance with a fixed plan. The results of similar service tests conducted on other railroads are taken advantage of where it appears that such tests were conducted intelligently.

No test is conducted unless competent supervision is arranged for and one or more individuals designated to follow up the test and record the results according to a prescribed form. Prior to engaging on any test, the expense of making the test is estimated in man-hours and close consideration is given to the method of procedure and claims that the results to be secured will be accurate and conclusive. No patented device is accepted for test nor for service until the railroad association counsel has passed upon the status of the patent.

The item of test is regarded as one of service or expense according to necessity or the established value of the article. It is recognized that very often the user pays fully for the manufacturer's experiment. The effort is made to anticipate and prevent material failures through proper purchase but where these occur it is expected that they will be reported without delay.

#### Purchase of Specialties

It is believed that specialties or new devices, whether operating units in themselves or applied to an engine, car or machine tool, usually a patented device, too often are accepted on a saving statement basis without sufficient knowledge of their true maintenance cost. The manufacturer should be able to show to a very definite extent that the device itself is so constructed as to perform without undue maintenance expense in repair or labor, and to substantiate his claims. Proper application and use of the device is necessary and the railroad must take steps to know that the many devices used are performing properly.

To this end it particularly devolves upon the purchasing department to so carry its records as to note the increase or decrease of purchase of units or parts. Increase of expenditure for repair parts may denote necessity for replacement of the unit or that its upkeep is expensive. Too often a device is repaired when replacement would result in economy. As an example it is stated that one road found track drills of an obsolete pattern cost in repairs over \$22.00 per drill, when they could have been replaced at a cost of \$18.00 for a new and better machine. In the same investigation, a similar condition applied to jacks, hand and push cars, switch stands, track tools and small motor cars. Particular consideration of the wearing parts as applying to any device should be worked out before the purchase is made.

#### General Policy Pursued

It is realized that the purchase of material or supplies for railroad consumption, affecting, as it does, the economical operation of the departments involved and finally the net revenue of the railroad, must be planned and executed to the best interest of all concerned. To establish this condition, those in charge of purchasing endeavor to keep in close contact with those using material, and become, so far as possible, a real part of each department; thus gaining a working knowledge of their requirements and keeping these

\*The preceding portion of this article dealing with the development of the Purchasing and Stores Departments as a unit on the Western Maryland appeared in the November 19, 1920, issue of the *Railway Age*.

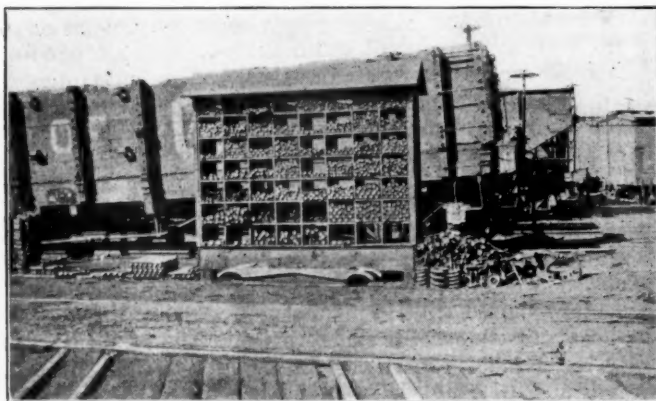
departments posted as to present and future market conditions.

It is recognized that economical purchase does not necessarily mean buying at the lowest price, for very often the determining factor is the knowledge that the dollar invested in material will become an earning factor and give full value for the amount expended. Anticipation of requirements is necessary, particularly on a rising or falling market. This involves a careful study of the proper amount of materials used, the delivery that can be effected or the stock that can be turned over; what is required for normal use, how many departments must be supplied with a certain line, and the avoidance of an excessive stock.

Another feature in purchase economy is careful study of use to which the material is put. Consideration of this element can be a decided factor in preventing misuse, misappliance and waste of material. A comparative price check on shop manufactured goods, as against articles purchased outside, is relied upon in determining the extent to which the practice of manufacturing in the railroad shop should be adhered to. It is believed that as a general proposition a railroad can afford to pay a small premium over the actual shop cost for the manufactured article purchased in the regular manner. The policy of buying at the point of shipment nearest destination is desirable as it tends to reduce the time required for delivery and the stock necessary to cover delays in the receipt of material. Patronizing home or line industries is also an important policy and should be adhered to so far as possible.

#### Tour of Duties for Stores Section Officers

In that part of this article appearing in last week's issue of the *Railway Age*, which dealt particularly with the development of the purchasing and stores departments as a unit on the Western Maryland, it was stated that the purchasing force is designated as the Service of Supply—Purchasing Section and the stores force as the Service of Supply—Stores Section. It was also stated that each position in this service, from the purchasing agent down, is classified



These Material Racks in Car Repair Yards Are Inventoried and Replenished Daily by Stores Section on the Western Maryland

by title and the work of each position is designated under the caption "Tour of Duties."

The "Tour of Duties" for all of the individual officers assigned to the purchasing section appeared in the first part of this article and an abstract of the "Tour of Duties" for some of the most important positions identified with the stores section appears as follows:

#### Duties of the General Storekeeper

The general storekeeper will have direct jurisdiction over, and shall be responsible for all unapplied material on the railroad. He should, as far as possible, keep the purchasing agent informed

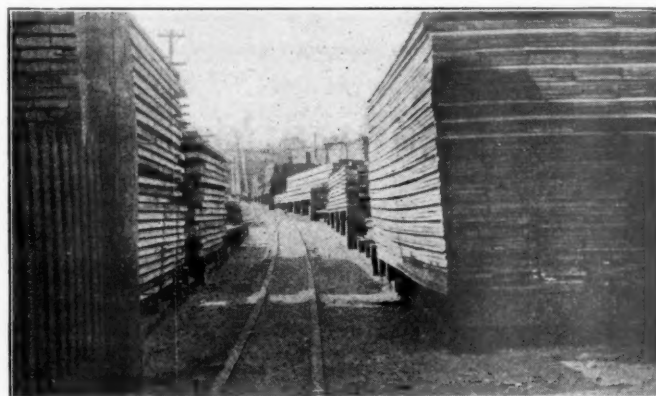
regarding grade or quality of material required by other departments and what is best suited for purpose intended.

Co-operates with heads of other departments in connection with material required for new jobs, etc., in order that purchasing and stores sections will be given sufficient time to have necessary material available at the time the work is to be started.

Familiarizes himself with the condition of power and its location on the railroad in order to notify division and local storekeepers to provide for necessary material occasioned by a transfer of equipment.

Follows up with the heads of all departments the use of material furnished to determine whether or not the best service is received from the articles purchased.

Personally approves all recommendations made in connection with the employment and assignment of working forces at all stores, also recommendations for improvements, or additional



Method of Storing and Piling Lumber on the Western Maryland

facilities necessary in the economical handling of material by the stores section.

Keeps in close touch with the general purchasing agent with reference to market conditions, prices, etc., so as to properly anticipate and protect the railroad's requirements.

Keeps closely in touch with the scrap situation on the railroad, and, by conference with the general purchasing agent, attends to the shipment of available scrap.

Directs all reclamation work.

Executes local purchases in the event of emergency.

Handles urgers direct with firms holding orders for material (to avoid the necessity for relaying these urgers through the general purchasing agent's office).

#### Duties of the Division Storekeeper

The division storekeeper will be responsible for the condition of all stores on his division including material on line of road.

Supervises all matters pertaining to the physical operation of his stores, keeping in close touch with the storekeepers, to make sure that the highest efficiency is being maintained by the working forces.

Personally checks all orders prepared by storekeepers and stock men, either in stock books or on floor sheets, to assure himself that the proper material, as well as the correct quantity, is being ordered.

Approves personally purchase, transfer requisitions and shop orders after they are prepared in the office.

Keeps closely in touch with the material situation at all points in his division to see that proper and prompt action is taken to secure material necessary to avoid delays to equipment and work. Approves all recommendations made by storekeepers in connection with the arrangements at various stores on his division, making report to the general storekeeper.

#### Duties of the Storekeeper

The storekeeper will see that stock books are maintained. That the information shown therein is accurate, and that his section stockmen get them in on time. In preparing orders, he will go over the stock books with his section stockmen, shop foreman, or others interested. He is expected to exercise good judgment in ordering, to see that quantities are in accordance with the amount he has on hand, due, owes, and what he uses per month (always taking into consideration such information that he might have to estimate what material will be needed).

Personally approves all requisitions received from the line of road or other stores for material; ships store items; transfers items from other stores or places orders with purchasing agent

for direct shipment of any items which are held in the general storehouse; turns over to supply car attendant any items of material which he considers would be economical to deliver from supply cars.

Supervises all requisitions to see that they are properly made up, and turned over to division storekeeper for approval (signing all requisitions in his absence, but keeping a copy of same for divisions storekeeper's attention on his return).

#### Duties of the Section Stockman

The section stockman will be accountable for the maintenance of a supply of all material included in the various classes in his section in sufficient amount to meet minimum requirements at all times.

He will be expected to handle and take care of the stock books (classes assigned him) showing monthly, on specified dates, the amount of material he has on hand, the amount he has due on unfilled requisitions, the consumption for the past specified time, surplus, items, etc. He will then enter in the stock book the amount of material which he wants ordered to take care of his requirements, using good judgment in all cases, to see that the material which he orders is actually required.

He shall tally in all material received (on standard form) both on purchase requisitions and from other stores, and will record in his records and stock books a record of the material and date received. He shall be expected to check weights of all materials which are purchased in this manner.

He shall see that all shipments for points on line or elsewhere are gotten together so that they can be handled by the shipping foreman and he will turn over to the storekeeper all "back orders" on requisitions for which he does not have material in stock to fill, showing on the face of same requisition the order number on which material is due. He will not be expected to hold requisitions or "back orders" for which he does not have material in stock until the requisition is properly stamped by the storekeeper.

He will be responsible for charging out all material removed by any persons from various classes in his section and will be required to produce charges on all issues during his tour of duty. He must also maintain an accurate check on all items stored in open bins, or racks, in order that removal in his absence will be detected. He will be required to investigate and develop by whom material was removed in his absence, and if proper charge was submitted insofar as he is able, reporting all irregularities direct to storekeeper.

He will be responsible for the packing and shipment of all materials from his section, whether carload or less than carload, and will be responsible for loss or damage through improper packing, marking or billing.

He will be responsible for proper identification of his stock, not only standard, but special items that are classified in the classes handled by him, and must at all times be prepared to answer questions concerning special and stock items—such as proper name and description and where used if standard number, date and price of items which are not standard but required as repairs to machinery, etc.

He will be expected to keep the grounds and buildings under his jurisdiction in a very neat and orderly manner, seeing that material is lined up in stock book order wherever possible.

He will be expected to report to the hurry clerk in storekeeper's office immediately any anticipated shortage of material, to enable the hurry clerk to procure material in time to prevent a shortage.

He will turn in to the hurry clerk daily, a list of live items which will be assigned him by the storekeeper, showing amount of each item he has on hand; amount which will be kept as a minimum stock; requisition number; amount and date ordered of the material due.

#### Duties of the Hurry Clerk

The hurry clerk will handle all urger forms, letters and telegrams from other stores and departments in connection with the hurrying of material and will draw a requisition to cover all items to be shipped that are not already on requisition. He will see that shipment of such items as covered by these hurries is made and that the person by whom material is urged is properly notified as to the action taken. If material is not available, he will take this up with the purchasing

department or the store or shop holding the order for same. He will see that each urger is handled with such promptness as to permit the material, if available, to be shipped by next train after urger is received. He will retain his own files and follow up all matters to a conclusion.

#### Special Representative

The duties of this position will be devoted to:

1. Standardization of materials; the proper description of each article; the service to which it is put; the proper and thorough entry in the stock book; the keeping of the stock book up to date. Where there is any question, he may himself or with the general purchasing agent, or with other officials, if necessary, arrive at a proper decision.
2. Study the use of materials and make recommendations to the general storekeeper as to conservation or other matters (particularly as to handling) which might prove of decided benefit.
3. So far as reclamation methods which might be brought to his attention in the study or use of material, make a detail memorandum for the general storekeeper.
4. Write up the purchasing department price book (to be finished before the end of the year) so that complete records may be kept in the purchasing department.

It is understood that the special representative will, in direct correspondence, obtain such catalogues and descriptive information as is necessary from outside concerns over the general storekeeper's signature; but that the question of specifying standards will be left to the general purchasing agent and general storekeeper acting with the Committee on Standards, which is composed of those two officers and the heads of departments. The special representative will attend such meetings whenever possible.

An important feature in the work of the stores section relates to shop deliveries and routing. Careful attention is paid to the shop delivery system on special materials with a view to avoiding delays to men occupied on machine work. The requirements are checked against the published shop repair program and materials are delivered so as to favorably affect shop output.

The stores section is authorized to, and does, follow up the delivery of all material on order, only calling on the purchasing section where difficulties are met that can be overcome by the purchasing section. The stores section is also given authority to arrange for and make local purchases along the line of road, first establishing the source of supply and prices to be paid, giving the purchasing section details of such arrangements.

The price book is depended upon to show where one or more devices or units are in service for the same purpose in one or more departments. This information is used to assist in establishing a proper standard. It is the particular duty of the special representative whose work is outlined above to see that all stock books are kept properly, that all material ordered is described and as soon as standards are determined on, that they be recorded.

#### Results of Organization

One of the objectives accomplished by the Service of Supply organization on the Western Maryland is that of following up the delivery of material from the time of purchase until it is put in actual use and, so far as possible, placing purchases on a budget system. This involves the proper recording of the unit bought, the quantity used and the total expenditure over a fixed period. It also necessitates a proper comparison of prices and the quantity that, with due economy, should be used; the heads of departments being kept fully posted. This has resulted in reducing the consumption of several items on the Western Maryland from 25 per cent of total investment to as high as 33½ per cent. As an example, the cost of locomotive scoops has been reduced from over \$12.00 per engine per year to approximately \$4.50 per engine per year.

The consolidation of the purchase section and stores sec-

tion into a single unit, has demonstrated economies which cannot be effected where two different departments are maintained; it has eliminated friction and has established the Service of Supply department as a unit of earning importance comparable with any other department of the railroad. Moreover, it has placed in line for promotion those who otherwise might be sidetracked and has created a degree of initiative and effort not ordinarily manifest. It has been established that this department can be made an influential factor toward improving the net earnings of the railroad.

## Railroad Asks Mandamus to Force Payment of Guaranty

**A** PETITION FOR A WRIT of mandamus was filed by the Grand Trunk Western in the supreme court of the District of Columbia on November 29 for the purpose of requiring the Secretary of the Treasury to honor a certificate of the Interstate Commerce Commission calling for the payment of \$500,000 as a partial payment of the amount due it under the guaranty provision of the Transportation Act.

This proceeding grew out of the opinion rendered October 7 last by the comptroller of the treasury, based upon certain certificates presented by the Interstate Commerce Commission to the Treasury Department in favor of the Grand Trunk Western and the Detroit, Grand Haven & Milwaukee, in which the comptroller held that partial payments could not be made by the Secretary of the Treasury to a carrier in advance of final settlement.

The comptroller took the position that the Interstate Commerce Commission was empowered to issue only one certificate to each carrier, which certificate must be for the full amount of the final settlement. While in this proceeding the Grand Trunk Western is the only petitioner, yet the result of the decision rendered in this case will involve the payment of nearly \$400,000,000 now due to the railroads under the guaranty provisions of the Transportation Act.

The proceeding is a test case designed and necessary to settle what the law is in respect to the authority and obligation of the Treasury Department to make partial payments under the guaranty, when amounts are certified by the Interstate Commerce Commission as certainly and in all events due, without waiting, before making any payment for the result of a final accounting which cannot be accomplished for a very considerable time. About \$254,000,000 of the guaranty has been paid to the railroads on applications for advances filed before September 1.

The petition for a writ of mandamus was filed after an effort had been made by General Counsel Thom of the Association of Railway Executives to enlist the influence of the President to obtain a change in the decision of the comptroller. This request was referred to the attorney-general. The Interstate Commerce Commission, at the request of the carriers, had also attempted to get a new ruling from the comptroller by submitting a new certificate for the Grand Trunk Western in a modified form, on November 24, but the comptroller, in a letter to the Secretary of the Treasury dated November 27, adhered to his original opinion and advised the secretary that he was not authorized to issue a warrant for the amount stated in the new certificate. The revised certificate stated that the amount of \$500,000 is necessary to make good to the carrier the guaranty provided by the act and also:

"The commission hereby certifies that such amount of \$500,000 can not be reduced by further accounting or otherwise, and there may be, upon further investigation, additional amounts found due to said Grand Trunk Western Railway Company to make good to said carrier the guaranty

of section 209 of the Transportation Act, 1920, and which if, and when, ascertained by the commission will be certified to the Secretary of the Treasury."

After quoting paragraph (g) of section 209 of the Transportation Act, 1920, the comptroller said in the letter:

"The certificate submitted in this case is not a certificate to the effect that \$500,000 is the amount necessary to make good to the carrier the guaranty provided by section 209. You are advised, therefore, that for reasons set forth in my decision to you of October 7, 1920, 27 Comp. Dec., 331, in the matter of a former certificate for the same amount in favor of this carrier, you are not authorized under the law to issue a warrant on the certificate as submitted. See also in this connection my decision to you of November 10, 1920.

"It appears from papers accompanying your submission that the Interstate Commerce Commission is not prepared to issue a certificate in this case substantially in the form indicated in the decision of November 10 as necessary to authorize payment.

"Commissioner Meyer in letter to you dated November 24, made the following statement:

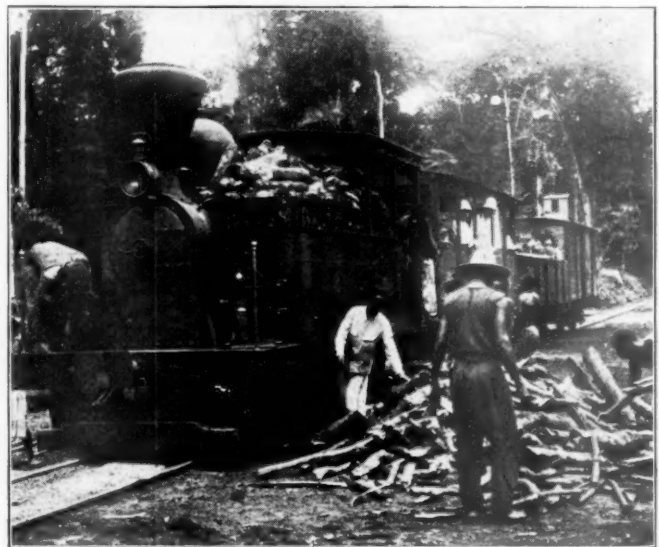
"On behalf of Division 4 I desire to call your attention to two communications which are addressing to you today through our secretary. The first cancels our certificate No. A-246, and the second transmits to you a substitute certificate in somewhat modified form, covering the same situation.

"The changes in the original certificate were made primarily at the request of the interested carriers who believe that the revised form of certificate will more clearly present the legal questions at issue in the interpretation of Section 209 of the Transportation Act. Believing that you are equally interested with us in securing an authoritative judicial interpretation of this provision of law we acquiesced in the request of the carriers."

"In view of the fact that a settlement by the auditor for the State and other departments is a prerequisite to any final action by you in the matter, it is suggested that you transmit the certificate and accompanying papers to said auditor in order that final settlement of this claim may be made in accordance with this decision."

The court ordered the Secretary of the Treasury to show cause on December 7 why the writ should not be issued.

NINETY-FOUR PER CENT of the passenger trains operated over the Baltimore & Ohio in October made schedule time and 83 per cent arrived at destination on time.



Photograph from Underwood & Underwood, N. Y.

**A Railroad Train That Crosses the Equator Near Stanley Falls, Africa**

# I. C. C. Orders Increase in Intrastate Passenger Fares

## Commission Supersedes State Authority in Additional Decisions Involving Intrastate Rates Under Transportation Act

WASHINGTON, D. C.

THE INTERSTATE COMMERCE COMMISSION on November 26 handed down its decision in the Illinois intrastate rate case, in which it is held that passenger fares for intrastate travel in Illinois lower than are charged for interstate travel subject interstate travelers and points outside of the state of Illinois to undue prejudice and disadvantage and constitute an unjust discrimination against interstate commerce. The carriers are ordered to increase the passenger fares within the state of Illinois 20 per cent to bring them up to the level of interstate fares and to establish the surcharge of 50 per cent on Pullman traffic prescribed by the commission last August 10. Questions relating to freight rates, commutation and excursion fares are reserved for later determination. The

Illinois Commission authorized a freight rate increase of only 30 per cent, whereas the Interstate Commerce Commission had authorized 40 per cent for the eastern district and 35 per cent for the western district.

Illinois has a two-cent fare law but the three-cent rate of the Railroad Administration is still in effect under a federal court injunction restraining the enforcement of the state law.

This decision, by Commissioner McChord, expresses the attitude of the commission more in detail than the decision in the New York case reported last week and sustains the argument of the carriers that the commission's power to remedy state discrimination against interstate commerce has been broadened by the transportation act.\* An abstract of the report follows:

### Report of the Commission

#### Effect of Lower State Fares

All the carriers in Illinois are engaged in the handling of both state and interstate passengers and such passengers are carried on the same trains.

Evidence offered by the carriers indicates that, if the present intrastate rates are continued for one year and there is the same intrastate passenger travel as in 1919, the loss to the carriers, due to their failure to secure the 20 per cent increase in intrastate fares, will approximate \$7,000,000, and if the 2-cent intrastate fare should become effective the loss would be \$15,000,000.

Near the borders of Illinois are such points as St. Louis and Hannibal, Mo.; Keokuk, Davenport, Muscatine, Burlington, Dubuque and Clinton, Iowa; Beloit, Janesville, Madison, and Milwaukee, Wis.; Gary, Indiana Harbor, Hammond, Whiting, La Fayette, Terre Haute and Evansville, Ind.; and Paducah, Ky. All such points are in constant competition, more or less, with cities in Illinois for population, industrial development and business growth.

Quincy, Ill., is in keen competition with Burlington and Keokuk, Iowa. A branch line of the Chicago, Burlington & Quincy runs between Burlington and Quincy. Trains leave both points in the forenoon and return in the afternoon, carrying people from Quincy and Burlington out into the country to sell goods and also carrying the country people into Quincy and Burlington to buy goods. The time of the trains is fixed so that Quincy and Burlington are on an approximate equality as to service, but passengers to and from Quincy ride on a basis of 3 cents per mile, while those to and from Burlington pay 20 per cent more, or on a basis of 3.6 cents per mile. Danville, Ill., has a country trade coming into it from Indiana for distances of perhaps as much as 50 miles. Illinois people also come into Danville to trade. Those from Illinois pay the lower fare. Chicago competes

with St. Louis, Evansville and Paducah in doing business in interior Illinois. Passengers to and from Chicago, of course, have an advantage in fares over the other points. These instances are given of record as typical. Similar situations may be found all around the borders of the state.

As is commonly known, jobbers send their salesmen to visit the trade. Those in Illinois pay the lower basis of charge. That the differences referred to are injurious to those who must pay the higher fares is obvious.

Just across the river from Rock Island, Ill., is Davenport, Iowa. The total railroad and sleeping car fare from Chicago to Rock Island is \$8.04 and from Chicago to Davenport \$10.36. The difference of \$2.32 against Davenport is not due to the slight additional haul incurred in crossing the bridge between the two cities, but is in the main, the result of the failure of the Illinois authorities to permit the same basis of charge as we have fixed. Passengers for Davenport are carried in the same train and by the same railroad as those for Rock Island. The train carries one sleeping car which runs to Rock Island and another which goes across to Davenport. Passengers to Rock Island pay on the basis of the intrastate fare of 3 cents per mile, plus the intrastate sleeping car fare, without a surcharge, plus 8 per cent war tax; while passengers to Davenport pay on the basis of 3.6 per cent per mile, plus a sleeping car fare the same as is charged to Rock Island, but with a surcharge for the sleeping car accommodations, plus the war tax of 8 per cent on the greater total fare. Except for the crossing of the bridge, as previously indicated, there is no difference in the character of the service. Until the increases in interstate fares became effective August 26 both cars were equally well patronized, but since that date passengers for Davenport ride to Rock Island and walk across the bridge. No one familiar with the conditions buys a ticket to Davenport or rides in the Davenport car unless the Rock Island car is full. Situations almost identical with that described above are found as between St. Louis, Mo., and East St. Louis, Ill., and as between Paducah, Ky., and Metropolis, Ill., and it is testified that there are other instances. Any incidental

benefits that may accrue to an Illinois point, like Rock Island, by reason of having passengers leave their trains at such points rather than at the interstate point, their real destination, would be at the expense and to the detriment of that interstate point. Davenport and Rock Island are in competition with each other for local retail and perhaps some wholesale trade in Illinois, Iowa and Missouri. Moreover, by reason of these disparities intrastate passenger traffic increases and interstate passenger traffic decreases.

There is reason to believe that in general, measured per passenger carried, it costs more to handle the intrastate than the interstate traffic. The interstate passenger is generally a long-haul passenger, while the intrastate passenger generally goes a much shorter distance. It is testified that there is relatively the same amount of service for pick-up and delivery, for ticket sales, for accounting, etc., in connection with intrastate traffic as there is in connection with interstate traffic. In other words, the terminal costs are about the same whether the passenger is intrastate or interstate. Coaches used in interstate traffic generally are in use at night as well as in the daytime, but the coaches used for intrastate movements are usually idle during the night. Although old and second-grade coaches are often used for intrastate traffic, which tends to reduce the cost, the density of the traffic is said to be much lighter. An intrastate coach is said ordinarily to carry fewer passengers and to make much less mileage than the average interstate coach.

The record shows how the lower intrastate fares affect the revenue that should accrue from interstate traffic in another manner. Certain carriers between given points operate intrastate while others between the same points run interstate. Competition generally compels the maintenance of the same fares via all lines. The interstate carriers must either meet the Illinois intrastate fares or lose the traffic to lines within the state. In either event the total revenue from interstate traffic is adversely affected.

The Illinois intrastate fares have the effect of otherwise reducing the earnings on interstate traffic, or rather on what would be interstate traffic if it were not for the differences in fares. Travelers

\* Oral arguments will be heard before the commission at Washington on December 13 in five cases involving intrastate rates. These are the Michigan, Ohio, Florida and Nebraska cases and the Illinois freight rate case. Oral arguments in the Minnesota case were heard before the commission on November 26, and arguments in the North Carolina, Iowa and Arkansas cases were heard this week.

destined to or coming from points outside the state find it cheaper to pay the intrastate fare within Illinois and the interstate fare beyond the border than to pay the through interstate fare. It is a common practice for travelers to buy their tickets to the state line, leave the train, immediately buy a ticket thence to destination, and then resume their journey on the same train. Technically they break their journey, making part of it intrastate, but practically they resort to a device which defeats the through fare. This practice is likely to result in delayed trains, especially when there are a number of people taking advantage of it. In addition, it may require the carriers to provide additional employees to sell tickets or receive fares. It may result in certain border points being favored as gateways unless the carriers via other routes reduce their charges to meet the situation. It is testified that the practice has had these results in other states in the past. Also that the practice has made it impossible in some parts of the country to maintain reasonable interstate fares; that is, the practice became such a nuisance that the carriers found it advisable to publish through fares based upon the factors to and from state borders. Principally as a matter of general interest, an instance was cited in which the authorities of one state went so far as to require the carriers to post notices at their stations to the effect that through fares could be defeated by resorting to the device above described.

The state authorities take the position that we have no power to act with respect to intrastate rates or fares except to remove discriminations found to exist which injuriously affect persons or localities in interstate commerce. They urge that the evidence in this case does not warrant a finding that the fares generally throughout the state subject interstate commerce to unjust discrimination within the meaning of the statute.

Section 3 of the act provides as follows:

That it shall be unlawful for any common carrier subject to the provisions of this act to make or give any undue or unreasonable preference or advantage to any particular person, company, firm, corporation, or locality, or any particular description of traffic, in any respect whatsoever, or to subject any particular person, company, firm, corporation, or locality, or any particular description of traffic, to any undue or unreasonable prejudice or disadvantage in any respect whatsoever.

This particular provision of the act stands unamended by the transportation act, 1920. It was this provision which gave rise to what is commonly known as the Shreveport doctrine, laid down by the Supreme Court in *Houston & Texas Railway v. United States*, 234 U. S., 342, commonly known as the Shreveport Case. That case involved the validity of our order prescribing maximum reasonable rates from Shreveport, La., to points in Texas and requiring the removal of undue prejudice against Shreveport as to traffic to Texas points found to result from lower state commission-made rates from Dallas and Houston, Tex., toward Shreveport for equal distances.

In *American Express Co. v. Caldwell*, 244 U. S., 617, and *Illinois Central R. Co. v. Public Utilities Commission*, 245 U. S., 493, the principles announced in the Shreveport Case, supra, were reaffirmed, but it was also held that in each such case our order must have a definite field of operation and not leave uncertain the territory or points to which it applies.

The state authorities contend that paragraph 4, section 13, of the act is merely

a restatement of the effect of section 3 of the act as interpreted by the Supreme Court in the Shreveport Case, supra. The provision in question reiterates in effect what is stated in section 3, but in it Congress has gone further than declaring that there shall be no undue or unreasonable advantage, preference, or prejudice as between persons and localities, as in section 3, and has forbidden and declared unlawful "any undue, unreasonable, or unjust discrimination against interstate or foreign commerce." The term "commerce" covers the entire field of transportation—the traffic itself and all the instrumentalities and means of carrying it on. The language used is certainly broad enough to cover every discrimination growing out of the relation between intrastate and interstate commerce which injuriously affects the latter.

Legislatures do not enact laws for the purpose of construing a previous act unless a construction has been placed upon the prior act which was not intended by the legislature. There is certainly nothing in paragraph 4 of section 13 which indicates any purpose of construing section 3 of the act.

The Supreme Court, in the *Minnesota Rate Cases*, 230 U. S., 352, recognized the power of the federal government to supervise the rates of intrastate commerce when they are so intermingled with interstate commerce on roads engaged in both that in the interest of interstate commerce such regulation becomes necessary.

#### The Purpose of Congress

From the debates, committee reports and the act itself, Congress evidently concluded that a crisis threatened the transportation of the country. Notwithstanding the constant efforts of the railroad administration to improve conditions, and because of the mounting cost of operation, the excess of operating expenses over revenues during the period of federal control and after was steadily increasing, resulting in great losses to the government. The primary purpose of Congress was to return the roads to private ownership surrounded by such safeguards as would assure the people of the whole country adequate service. To rehabilitate the railroads so that they might perform the duties necessary to the very life of the nation Congress determined upon a definite plan. It extended the guaranty period for six months beyond the termination of federal control. It directed us to initiate, modify, establish, or adjust rates so that carriers as a whole (or as a whole in each of such rate groups or territories as we may from time to time designate) will, under honest, efficient and economical management and reasonable expenditures for maintenance of way, structures and equipment, earn an aggregate annual net railway operating income equal as nearly as may be to a fair return upon the aggregate value of the railway property of such carriers held for and used in the service of transportation. It provided that in determining the fair return to the carrier we "shall give due consideration, among other things, to the transportation needs of the country and the necessity . . . of enlarging such facilities in order to provide the people of the United States with adequate transportation." It directed us to take as such fair return for two years beginning March 1, 1920, a sum equal to 5½ per cent of the aggregate value of the carriers' property, and authorized us, in our discretion, to add thereto a sum equal to ½ of 1 per

cent of such value to make provision for improvements, betterments or equipment.

The terms of the act are sufficiently broad to forbid unjust discrimination against interstate commerce without reference to particular persons or localities. Considering the conditions existing at the time of the passage of the act, the purpose of the act to correct these conditions, and the legislative scheme adopted by Congress to carry out that purpose, we have no doubt that Congress meant to give full import to the language used, and that the prohibition against "undue, unreasonable, or unjust discrimination against interstate or foreign commerce" is not limited to particular persons or localities, but is applicable to such discrimination against interstate or foreign commerce in their broad definitions.

#### Not an Encroachment on State Rights

This construction of the act cannot be said to be an encroachment on states' rights. The power to regulate interstate commerce was granted Congress chiefly as a means of protection against commercial hostilities and reprisals between the various states which overwhelmed the Confederation and threatened the commercial destruction of some of the states. The existence of that exclusive power in Congress is of greater importance now than at the time of the adoption of the constitution, for the protection of the states themselves. Today railroads run the length and breadth of the country. Many of the roads traverse with their own lines a number of states. Even though a carrier's rails may be confined wholly within a state, it is ordinarily an important link in the transportation of commerce from and to other states. Each state, therefore, is vitally interested in the transportation conditions in the other. A narrow or selfish policy with respect to the transportation instrumentalities within a state may cripple or suppress the commerce of the other states. It was stated on argument that about 31 states had permitted the same increases in fares as we fixed in *Increased Rates*, 1920, supra. Are the transportation facilities of these states and of the nation to be put in jeopardy by reason of the failure of the other states to conform to the plan adopted by the Congress for the welfare of the nation as a whole? The states gave to Congress the power to protect and promote the instrumentalities of interstate commerce and as the states' right they look to Congress to exercise that power.

In our decision in *Increased Rates*, 1920, we fixed the increases in rates, fares and charges necessary to comply with the act. It must be remembered that in fixing those increases we were acting within our power "to prescribe just and reasonable rates." The resulting rates therefore become, in effect, what Congress has deemed on the whole necessary to yield the carriers the prescribed return on the value of their property.

It is further urged that in *Increased Rates*, 1920, we did not find the value of any railroad property in the state of Illinois or elsewhere in the eastern or western groups as designated in that report. We were directed to prescribe rates so that in the aggregate they would yield a certain return, as nearly as may be, "upon the aggregate value of the railway property of such carriers held for and used in the service of transportation." We understand the interstate commerce act to require us to determine upon a valuation for the total property of the

carriers and not for the property that might by some necessarily arbitrary method or formula be assigned to interstate traffic, and that is the course we followed in arriving at the estimated value used in Increased Rates, 1920.

In that case, conformably to the act, in the exercise of our power to prescribe just and reasonable rates, we determined the increased fares that were necessary in order that the passenger traffic should contribute its proper proportion to a fair return on the aggregate property value. If, without good reason, the fares within a state are lower than those authorized and established for interstate application, intrastate passenger traffic will not contribute its just share to the passenger revenues of the carriers, and the carriers may not earn the statutory return without further increases in the transportation charges on other traffic, including interstate commerce, thus unjustly discriminating against such commerce. Such a situation will also result, as the record discloses, in depleting the revenues from interstate commerce by diverting to intrastate channels what otherwise would form part of interstate passenger traffic. Thus, the existence, side by side with interstate fares, of intrastate fares fixed at a lower level constitutes an obstruction to interstate commerce, thereby unduly, unrea-

sonably and unjustly discriminating against such commerce, in contravention of the act.

In Increased Rates, 1920, p. 254, in approving freight-rate increases of electric lines equal to those approved for trunk lines in the same territory, we said that this was "not to be construed as an expression of disapproval of increases, made or proposed in the regular manner, in the passenger fares of electric lines." There was, however, no approval of increases in such fares. Of the two electric lines hereinbefore mentioned, the Chicago, Lake Shore & South Bend appears to have taken the 20 per cent increase in its interstate fares; but, no such increase having been approved, none of the electric lines is included in our findings herein. Also, our findings herein, otherwise than as to the surcharges hereinafter mentioned, will relate only to the standard local and interline fares, exclusive of excursion, convention and other fares for special occasions, commutation and other multiple forms of tickets, extra fares on limited trains, and club-car charges. The excluded fares and charges will be reserved for further consideration.

We find that there are no conditions within Illinois justifying the maintenance of lower intrastate passenger fares therein than the fares applicable to the interstate

transportation of passengers to, from or through the state; and that the maintenance of such intrastate fares lower than the just and reasonable interstate fares and charges established by the carriers pursuant to Ex Parte 74 gives an undue preference and advantage to persons traveling in intrastate commerce in Illinois and subjects persons traveling in interstate commerce to, from or through the state to undue prejudice and disadvantage, and unjustly discriminates against interstate commerce; which undue prejudice and discrimination should be removed.

We are of opinion and further find that, to remove the undue prejudice and unjust discrimination found to exist, the present fares for the intrastate transportation of passengers in Illinois should be increased in amounts which shall correspond with the increases heretofore made as aforesaid in interstate passenger fares; and that surcharges upon the contemporaneous charges for space occupied by passengers traveling in intrastate commerce in sleeping cars and parlor cars in Illinois, amounting to 50 per cent of such charges, should be established, such surcharges to accrue to the rail lines.

An order in accordance with the foregoing findings and conclusions will be entered.

Eastman, Commissioner, dissents.

The Interstate Commerce Commission on December 1 also made public its decision in the Wisconsin passenger fare case, ordering the railroads on or before January 15 to increase the intrastate passenger fares and excess baggage charges by the amount of increase applied to the interstate rates, and also to establish a surcharge upon passengers traveling in sleeping and parlor cars corresponding to the surcharge made for interstate travelers in the commission's decision in Ex Parte 74. The decision, by Commissioner Hall, does not discuss the contentions of the state authorities or of the railroads because in the main they are the same as those considered in the New York and Illinois cases. The Wisconsin commission had allowed increases corresponding to the interstate increases in the rates for freight service and on milk and cream, with some exceptions, but the increases in intrastate passenger fares and excess baggage charges and the surcharge were not allowed, on the ground that the state commission was without jurisdiction. Wisconsin has a two-cent fare law, but its enforcement has been temporarily restrained by injunction and the three-cent per mile basis initiated by the Railroad Administration is still in effect.

Evidence offered by the carriers indicates that if the present intrastate rates are continued for one year and if there is the same intrastate travel during that year as in the calendar year 1919, the direct losses to the carriers due to their failure to secure the 20 per cent increase in intrastate fares would approximate \$2,400,000, and if the two-cent intrastate fare should become effective the loss would be approximately \$6,000,000. The findings of the commission are without prejudice to the right of the authorities of the state of Wisconsin or of any other party in interest to apply for a modification as to any specific intrastate rates or charges on the ground that the latter are not related to the interstate rates in such a way as to contravene the provisions of the interstate commerce act. Commissioner Eastman entered a dissent, as he had in the New York and Illinois cases.

#### Injunction Permits Illinois Passenger Rate Raise

A temporary injunction, restraining Attorney General Edward J. Brundage of Illinois, State's Attorney Maclay Hoyne and the Illinois Public Utilities Commission from prosecuting railroads in Illinois when they raise their intra-

state passenger rates from three cents per mile to 3.6 cents per mile in accordance with the Interstate Commerce Commission order of November 26, was granted to 14 Illinois roads on November 29 by Federal Judge G. A. Carpenter at Chicago. As a result of the injunction intrastate passenger rates in Illinois were made comparable to the present interstate rates on December 1.

At the expiration of 10 days arguments to make the injunction permanent will be heard in the United States District Court at Chicago. Meanwhile it is expected that the remaining 39 roads in the state will apply for similar injunctions.

Attorneys representing the 14 roads named in the injunction stated that their action in petitioning for an injunction was a precautionary one to forestall action by Attorney General Brundage, who announced recently that he was preparing to file a request for an injunction restraining the roads from carrying out the orders of the Interstate Commerce Commission.

Illinois state law fixes the legal passenger rate at two cents per mile. During federal control the intrastate rates were raised to three cents per mile. Following the granting of increased interstate rates by the Interstate Commerce Commission, the Illinois Public Utilities Commission denied the application of the carriers for comparable increases in intrastate rates on the grounds that it had no legal right to overrule a state law. Later, hearings were held before the state commission on passenger rates, with the result that an order was handed down to the effect that the two cent fare should be charged. The state commission was enjoined from enforcing this order by the federal courts, which held that the three cent rate was at that time reasonable.

The present injunction restrains the state officers from enforcing the three-cents-per-mile injunction or, in other words, prohibits the state from taking any action to prevent the roads from complying with the Interstate Commerce Commission's recent order.

PENNSYLVANIA RAILROAD STOCKHOLDERS numbered 129,960 on November 1, an increase of 720 over October 1, and of 16,079 over November 1, 1919.

# Operating Statistics for September

The Interstate Commerce Commission has issued a tabular summary of operating statistics for the month of September,

1920, of roads having annual operating revenues in excess of \$25,000,000. The figures for ton miles, car loading and car mileage, and net ton miles per car day (including mixed and special train service) are as follows:

		Freight service train miles (thousands)		Net ton-miles (millions)		Net ton-miles per loaded freight car-mile		Car-miles per car day		Net ton-miles per car day	
		1920	1919	1920	1919	1920	1919	1920	1919	1920	1919
New England Region—											
Boston & Albany.....	September	308	319	133	153	25.2	24.4	29.9	34.6	513	607
	Nine months	2,755	2,316	1,219	1,023	24.8	21.9	26.6	31.9	464	494
Boston & Maine.....	September	704	698	372	355	25.8	24.3	19.0	17.8	348	314
	Nine months	6,200	5,185	2,927	2,459	24.4	23.1	16.0	17.5	285	295
New York, New Haven & Hartford.....	September	555	579	302	346	24.8	24.6	12.6	13.5	233	252
	Nine months	4,480	4,440	2,228	2,096	23.5	23.2	9.9	14.1	175	245
Great Lakes Region:											
Delaware & Hudson.....	September	417	416	392	362	36.1	36.6	28.9	31.2	701	744
	Nine months	3,788	3,263	3,354	2,690	35.2	35.7	27.2	26.0	651	600
Delaware, Lackawanna & Western.....	September	559	469	489	429	28.4	28.5	32.0	30.9	637	653
	Nine months	4,548	4,111	3,888	3,747	28.8	29.7	27.6	27.3	567	571
Erie (including Chicago & Erie).....	September	1,147	1,041	1,029	995	28.2	28.2	33.0	34.3	597	657
	Nine months	9,484	8,507	8,746	7,774	29.3	28.6	24.4	30.7	505	588
Lehigh Valley.....	September	595	564	534	577	31.4	31.7	23.1	23.7	455	354
	Nine months	5,338	4,778	4,741	4,307	31.5	30.4	20.3	22.7	451	481
Michigan Central.....	September	573	555	456	448	25.0	21.6	27.0	24.0	480	399
	Nine months	4,694	4,566	3,763	3,309	24.5	20.8	19.0	25.7	352	382
New York Central.....	September	2,140	1,984	2,255	2,131	29.2	27.0	26.3	26.3	481	496
	Nine months	18,497	16,601	18,202	15,830	28.1	26.2	22.1	24.0	418	416
Pere Marquette.....	September	373	367	254	239	27.4	24.9	17.9	17.8	367	340
	Nine months	3,045	2,985	2,024	1,872	26.5	24.2	15.4	18.2	317	328
Pittsburgh & Lake Erie.....	September	164	138	273	209	42.1	41.8	12.5	10.5	359	286
	Nine months	1,087	1,143	1,647	1,654	42.3	41.0	8.0	9.1	233	245
Wabash.....	September	642	562	474	415	25.8	24.6	28.6	27.6	568	543
	Nine months	5,150	4,589	3,618	2,958	25.0	23.4	26.1	26.6	514	457
Ohio-Indiana-Allegheny Region:											
Baltimore & Ohio.....	September	2,116	1,913	2,051	1,870	36.7	33.7	25.6	24.4	618	567
	Nine months	17,644	14,515	16,098	12,952	34.4	33.4	24.5	22.7	572	494
Central of New Jersey.....	September	332	322	225	230	33.1	32.9	14.2	15.1	305	313
	Nine months	2,840	2,671	1,946	1,788	33.8	33.0	13.6	13.2	294	270
Cleveland, Cincinnati, Chicago & St. Louis.....	September	749	699	634	624	29.8	28.1	31.0	31.8	589	630
	Nine months	6,371	5,513	5,132	4,645	28.4	27.7	27.7	27.2	538	514
Pennsylvania System.....	September	5,150	5,135	4,880	4,999	36.2	34.0	22.6	22.7	549	533
	Nine months	43,537	41,896	37,976	36,723	34.2	36.6	19.3	19.3	447	449
Philadelphia & Reading.....	September	654	648	592	651	37.9	38.2	20.8	20.6	502	517
	Nine months	5,648	5,125	5,268	4,756	38.0	37.8	19.1	19.0	493	471
Pocahontas Region:											
Chesapeake & Ohio.....	September	887	853	1,120	1,059	41.6	41.2	37.2	31.2	915	775
	Nine months	7,703	6,411	9,303	7,507	41.0	40.5	36.5	25.0	918	605
Norfolk & Western.....	September	861	813	1,039	1,000	42.8	39.3	34.9	36.3	924	887
	Nine months	7,192	6,513	8,647	7,722	41.5	39.5	34.9	28.3	929	698
Southern Region:											
Atlantic Coast Line.....	September	561	562	285	265	23.1	20.9	22.9	20.3	379	318
	Nine months	6,290	5,875	2,915	2,682	21.4	21.5	22.8	20.5	336	301
Illinois Central.....	September	1,936	1,620	1,515	1,251	30.7	27.4	43.8	39.0	877	750
Including Yazoo & Mississippi Valley.....	Nine months	17,380	13,074	12,985	9,874	29.0	26.7	40.8	31.9	809	593
Louisville & Nashville.....	September	1,597	1,551	886	839	24.5	22.6	23.9	22.0	436	387
	Nine months	14,114	12,778	7,522	6,721	23.0	22.0	21.9	20.2	363	317
Seaboard Air Line.....	September	423	342	226	190	24.8	22.4	28.0	23.3	456	407
	Nine months	4,189	3,486	2,186	1,727	23.5	22.2	23.6	20.3	408	334
Southern Railway.....	September	1,513	1,184	765	684	31.9	29.6	29.9	30.7	626	621
	Nine months	13,371	9,903	7,185	5,271	30.0	29.0	31.1	25.0	628	500
Northwestern Region:											
Chicago & Northwestern.....	September	1,877	1,732	1,221	1,031	29.1	24.4	26.0	23.7	499	391
	Nine months	15,417	13,168	8,715	7,502	26.0	24.8	21.6	19.8	383	330
Chicago, Milwaukee & St. Paul.....	September	1,827	1,931	1,202	1,326	25.6	24.9	35.2	31.2	611	553
	Nine months	15,492	14,856	9,944	9,508	25.3	24.7	25.2	26.6	449	462
Chicago, St. Paul, Minneapolis & Omaha.....	September	337	356	162	169	24.0	23.2	23.0	25.5	432	415
	Nine months	3,124	2,723	1,404	1,223	23.7	23.4	22.1	19.7	397	319
Great Northern.....	September	1,112	1,140	989	990	30.8	29.1	31.5	33.0	602	620
	Nine months	8,977	8,210	7,128	6,570	28.7	28.8	27.1	22.2	539	441
Minneapolis, St. Paul, Sault Ste. Marie.....	September	577	618	331	369	25.3	23.9	28.9	32.2	513	577
	Nine months	5,044	4,652	2,709	2,420	23.4	22.5	26.9	23.2	479	389
Northern Pacific.....	September	1,055	1,112	793	843	27.2	26.2	34.6	35.1	647	645
	Nine months	8,741	8,046	6,739	6,150	27.2	27.0	33.7	26.2	668	503
Oregon-Washington R. R. Navigation Co.....	September	250	242	171	168	27.9	26.4	36.0	31.7	727	609
	Nine months	2,257	1,883	1,601	1,277	28.1	26.3	30.4	26.4	662	525
Central Western Region:											
Atchafalpa, Topeka & Santa Fe.....	September	1,764	1,933	1,063	1,214	22.6	21.6	37.3	37.1	566	570
	Nine months	16,171	14,558	9,674	8,463	22.8	22.1	32.6	27.3	513	425
Chicago & Alton.....	September	348	355	202	209	26.5	26.1	22.9	22.6	406	403
	Nine months	3,092	2,795	1,758	1,566	26.9	26.0	23.3	22.1	421	366
Chicago Rock Island & Pacific.....	September	1,388	1,436	722	795	25.2	25.0	31.5	25.2	569	483
	Nine months	12,961	11,310	6,669	5,597	24.2	23.3	26.0	24.6	461	411
Chicago, Burlington & Quincy.....	September	1,812	1,787	1,423	1,453	29.0	27.4	36.6	35.4	682	655
	Nine months	15,682	13,661	12,199	10,383	28.3	26.9	31.1	26.6	611	484
Denver & Rio Grande.....	September	354	348	211	206	27.5	26.7	24.1	20.7	443	370
	Nine months	2,617	2,326	1,624	1,364	29.9	29.3	19.6	14.1	407	279
Oregon Short Line.....	September	461	450	306	293	28.1	26.8	48.5	47.4	890	847
	Nine months	3,802	3,222	2,678	2,148	29.4	27.4	46.6	32.9	972	635
Southern Pacific.....	September	1,446	1,245	973	850	25.0	24.7	38.4	38.8	708	660
	Nine months	11,255	9,865	7,701	6,928	25.2	25.6	35.1	32.7	635	577
Union Pacific.....	September	1,661	1,398	1,070	906	23.7	22.0	88.3	76.7	1,439	1,125
	Nine months	10,894	9,630	7,307	6,448	24.2	23.5	71.4	56.7	1,273	946
Southwestern Region:											
Missouri, Kansas & Texas.....	September	323	298	180	178	24.0	23.5	29.0	28.8	421	451
	Nine months	2,921	2,756	1,696	1,495	23.7	23.4	28.3	24.2	415	343
Missouri, Kansas & Texas of Texas.....	September	274	297	129	116	25.9	24.4	19.6	16.0	341	262
	Nine months	2,394	2,361	1,028	927	24.5	23.7	17.1	13.0	275	193
Missouri Pacific.....	September	1,165	1,153	747	724	26.9	25.0	24.3	27.9	467	510
	Nine months	10,488	9,167	6,769	5,498	26.8	25.3	22.7	21.3	454	390
St. Louis-San Francisco.....	September	938	889	411	437	25.6	25.4	23.1	22.5	385	412
	Nine months	8,214	7,342	3,729	3,280	25.8	24.9	21.0	18.7	369	318
Texas & Pacific.....	September	345	343	177	168	24.3	23.2	26.7	19.6	436	333
	Nine months	3,015	3,137	1,466	1,366	23.4	22.9	21.5	19.7	353	315



Lobby Talks, C. & W. I., R. R. Y. M. C. A., Chicago

## R. R. Y. M. C. A. Fifteenth International Conference

### Results in Recommendations for Big Advances Along All Lines During the Coming Year

**T**HE Fifteenth International Conference of the Railroad Y. M. C. A., held at Richmond, Va., week before last—the first one for eight years, because of the world war—was notable for several reasons. There is much discussion in the industrial and transportation fields in these days concerning the importance of the human element from the standpoint of safety and production. The railroad technical associations deal almost exclusively with methods of operation, or facilities and equipment, and give little, if any, attention to those problems which directly concern the human factor. The conference at Richmond dealt almost exclusively with personnel problems and with special emphasis upon the strengthening of individual character and the consideration of those things which affect the conscience.

The high point in the conference was reached on Friday morning when A. S. Morgan, a special R. R. Y. M. C. A. secretary in Canada, and J. M. Dudley, one of the International secretaries, told of the work which has been done upon the Canadian Pacific in recent months in building up the morale by appealing to the consciences of the men, the term men including officers as well as the workmen. A combined abstract of their remarks follows:

#### The Source of Safety

As a subject for speculation, the presence of good and evil in the world has been fully dealt with, but as a question vital to the successful operation of railways this problem seems to some to be the question of the hour. In the crisis caused by the world war, leaders—civil and military—called on all religious agencies to come to the rescue and help rally the moral forces. The necessity of morale as basic to victory was recognized by all thinking men.

Next to war as a gigantic enterprise stands the great industry of transportation by rail and water, and it is but natural that the lessons of the war should be applied here where morale is as essential as in an army, and an effort be made to build up moral character as a means of reducing the number of deaths, personal injuries, property loss and the wastage of men and money.

To test the practical value of this idea the Canadian Pa-

cific opened the door for a conductor, who is also a trained expert in Railroad Y. M. C. A. work, with an overseas experience, to travel over the Eastern Lines and present the arguments to the members of the railway family.

The message is based on the fact of the presence of evils, which make ineffective perfectly good safety appliances. It is based on the fact also, that the human factor is of equal or greater importance than the mechanical. It is rightly assumed that those of good intentions far outnumber those whose motives are bad and it is pointed out that the true and loyal owe it to themselves and the good name of the brotherhoods, as well as to the company and the public, to oppose those whose habits bring reproach upon their fellow employees, and jeopardize life and property.

The evils frankly dealt with are drink, theft, gambling, false reports of accidents, immoral habits and diseases and indecent language. The method followed at division points is to seek personal interviews with men of outstanding character and influence, frequently holding the interview in the home with the wife present, often with a babe in her arms. The stake of the wife, the child and the home in the matter of morality as a means of safety is easily shown. It is shown that back of a vast majority of accidents are man failures, and that back of these man failures there are in too many cases wrongdoing, acts that in themselves might easily be excused but for the fact that they lower the physical and mental powers and set a bad example for weaker men.

After several days of patient work in personal interviews, brotherhood leaders arrange meetings in their lodge rooms, officers co-operate to assemble men in shops and offices on company time, meetings are arranged with town councils and often with women. At the suggestion of Catholics and Protestants, priests and pastors have been visited and have been found eager to throw all their power into an effort to promote a morality that makes directly for the safety of life on the railways and for the happiness and prosperity of the family. Priests, ministers, officials and labor leaders speak from the same platform and unite in organizing for the uplift of the community.

In 178 personal interviews in homes, cabooses, shops and

offices, in 83 group discussions with 4,268 men in attendance, not a word has been uttered in criticism of the frank way in which wrongdoing, including theft and gambling, has been handled. On the other hand, it is stated over and over again that, "the evils you enumerate are all here, and create a real danger to the life and reputation of railroad men generally."

This attempt to rally the moral forces, to appeal to the consciences of men on the Canadian Pacific, and to remind them of the place of God and faith and prayer in the discharge of responsibility, has revealed a depth of serious interest and a readiness to co-operate.

If a further word is necessary, let the auditing department show the millions of dollars spent in policing, investigating and in trying cases before the courts, as compared with the money spent for moral betterment, and let those who know decide whether an instructor of ability and character may not accomplish as much for law and order as the same man could do in the secret service, and whether it is not good business to spend something in an effort to encourage men to do right, while a whole army is maintained to try to arrest and jail those who do wrong.

#### A Larger Program Outlined

The program for the four days during which the conference was in session was made up of two parts. The larger proportion of the time was given to inspirational addresses or to brief talks or testimonies on the part of the delegates. The greater proportion of the 700 delegates was made up of railroad employees, both officers and men. Other sessions of the conference were given over largely to a consideration of the detail methods of carrying on the work and in planning for the future. The interest and enthusiasm developed to such a point that it was unanimously decided to set a membership goal of 200,000 in the drive next April.

Impressed by the spirit of the conference, the International Y. M. C. A. Committee in charge of Transportation met for an all-day conference immediately following the close of the meeting and outlined an aggressive and intensive campaign for the coming months. The committee also developed a report, based largely upon the proceedings of the Saturday morning session of the conference, in which it drew special attention to practical methods which could be used to advantage in carrying on the different phases of the work. It has been the practice during the past two years for each local association to devote one week each year to the special consideration of each of the seven most important of its activities. It is the purpose during such weeks, for instance, to present a program which will stir up a greater interest on the part of the membership in the particular activity under consideration and then to organize so that this activity will be carried out on logical and orderly lines during the entire year. An abstract of the report of the International Committee with relation to each of these seven-fold activities follows:

#### Social and Citizenship

In connection with good citizenship the International Committee wishes to emphasize the thought developed by E. D. White of the Union Pacific in his address on Americanization, and that is that the need for education along these lines is frequently greater among men who are Americans, but have not lived up to American ideals, than it is among men who are foreign born or of foreign born parents.

The local associations are specializing during the week of December 6-12 in developing programs for the year's work along social lines and on good citizenship. The following suggestions are based largely upon a report made by E. M. Kaufman, general secretary, Pennsylvania Railroad Y. M. C. A., Jersey City, N. J.

The program for Social and Citizenship Week naturally divides itself into two independent sections; one of these re-

lates to a social program which may be promoted by special committees and which should include the families of the men, as well as the men themselves. This part of the program needs little comment, as it is naturally the simplest part of the entire association program to carry out.

The other part of the program is concerned with good citizenship. This comprehends loyalty to and love of country, support of government, and voting intelligently on local, state and national issues. The committee in charge of this phase of the program should work in conjunction with the social committee and at special functions have speakers on some theme that will emphasize good citizenship, patriotism, and Americanization. It should at appointed intervals have speakers in shops and factories for the same purpose, and if there is a need conduct classes and arrange special patriotic events for foreign-born citizens. It would do well to organize a club with the slogan "Every Man a Voter."

Some of the practical things done at Jersey City last year in promoting good citizenship were the following: Two meetings were held in the churches at which the pastors spoke on Citizenship. There were two lectures in the "Y" building on Citizenship. Six Americanization meetings were held at the railroad shops and offices, special music being furnished by the drum and fife corps of one of the shops; eight different nationalities were represented at one of these meetings. One patriotic entertainment was held at the "Y" building. Two Americanization meetings were held in the "Y" building with the co-operation of the Pennsylvania Railroad and in the interests of the trackmen, at which the motion picture, "The Americanization of Tony," was shown and patriotic talks were made by several speakers.

Thirty-two employees were assisted in making out their naturalization papers as a result of the above-mentioned activities, and one class in English was started. An Americanization class was established which has a weekly attendance of 30 and which considers "Civics for Coming Americans." Motion pictures are shown occasionally at these classes. Social games and tournaments were also conducted and have been followed up ever since. These games had a good moral influence on several members, who were inclined to wayward habits, and consequently improved their citizenship.

During the coming Citizenship Week the flag is to be prominently displayed in the building for inspiration. The preamble of the Constitution will be posted and special patriotic literature will be placed in the reading room. More classes in English will be started. The Literary Club will adopt as its theme for the season, "The Constitution of the United States."

#### The Virtue of Thrift

The week of January 17-23, corresponding to National Thrift Week, will be devoted to a special consideration of matters referring to thrift and the development of an annual program for its promotion. The following suggestions are taken from an address at the Richmond conference made by Ward W. Adair, general secretary, Railroad Y. M. C. A., New York City:

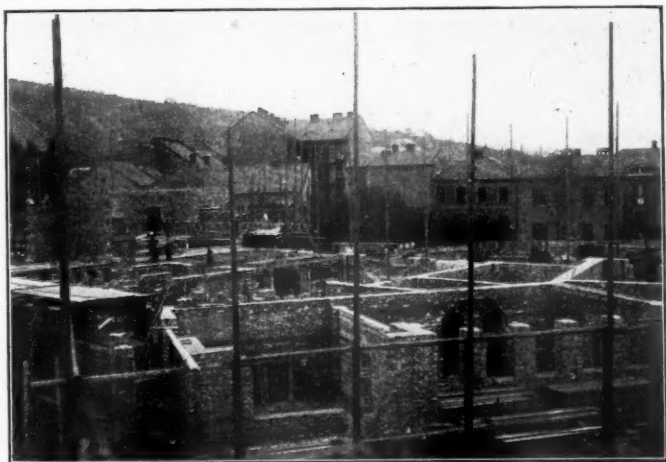
There is nothing new about the thrift idea. Away back in the days of Rameses, a young man named Joseph ran one of the most successful thrift campaigns in the world's history. And his was not a whirlwind drive lasting a week, but a sustained and methodical effort running through seven long years.

We are not inventing one more new craze when we bring this subject to the attention of our members and make it an actual part of our season's work. I would not convey the impression that thrift is the greatest of the cardinal virtues, and I think one of the mistakes in the promotion of this feature last year was the attempt to emphasize it out of all due proportion. If Joseph had gone at it the same way, his campaign would have blown up while his first fat cow was still

a calf. This year we are proceeding by sane and orderly methods to lay proper emphasis on a most important subject.

National Thrift Week will be held this year, January 17-23. The program is divided into seven distinct days on which different features of the thrift idea will be emphasized: 1. National Thrift Day or Bank Day. 2. Share with Others Day. 3. National Life Insurance. 4. Own Your Own Home. 5. Make a Will. 6. Thrift in Industry. 7. Family Budget. 8. Pay Your Bills Promptly. Of these important matters I shall stress only two or three.

1. *The Importance of Life Insurance.* You recall the story of the woman who wired the sad news to her parents. The message read "Dear John is dead. Loss fully covered by insurance." The Apostle said on one occasion "He that provideth not for his own hath denied the faith and is worse than an infidel." From what I have seen of the suffering of destitute families, I am inclined to think he put the truth mildly. We owe it to ourselves to carry adequate life insurance for the protection of our families, and we owe it to our members to see that they are educated on this most important matter. The spectacle of a little, helpless woman



Foundation for Bratislava Railroad Y. M. C. A. Building, Czecho-Slovakia

being left single-handed to fight the unequal battle for her own existence and that of her children, is one of the most pitiful we are ever called upon to witness. Let us get the importance of this matter so fixed in our minds that we shall not rest until we have done our best to remedy the present deplorable conditions.

I recall some years ago, in one of our Pennsylvania conventions, a good brother who had more piety to the square inch than I have ever known elsewhere, affected to be greatly shocked when somebody spoke of the importance of belonging to the Secretaries' Insurance Alliance. "I am grieved," he said, "to hear men in Christian service talking about life insurance. I have faith to believe that when I fall, I can trust the Lord to take care of my family." That is beautiful doctrine, but personally I believe in trusting the Lord and keeping the policy paid up.

2. *Own Your Home.* There is no young man worth his salt who does not some day aspire to have a little place he can call his own, and where he can gather his family about him and say,

"I am monarch of all I survey,  
My right there is none to dispute."

There is no greater incentive to economical living and careful saving than is provided by the purchase of a home that must be paid for within a reasonable time. The joy of the home owner in doing a hundred little things about the house, knowing that he is not doing them for a landlord, but for himself

and his family, is one of the delicious joys of life. Aspire to own a home of your own, even though you have to put a mortgage on it along with the other modern improvements. Billy Sunday has well said, "The renter who sings 'Home, Sweet Home,' is only kidding himself and serenading the landlord." There is a deep and true philosophy behind that remark.

3. *The Family Budget.* One of the secrets of family debt is the fact that no careful effort has ever been made by such families to live within their means. Cutting the garment to fit the cloth is something they have never thought of. You recall that classic of Irving Bacheller's, "Keeping Up With Lizzie." The sin of American families is the attempt to appear richer than they are—to keep the pace that is being set by some Lizzie, either tin or otherwise.

The family budget is a carefully wrought out document, which takes into account the exact amount of income, and distributes it in a fixed way so that a reasonable percentage will be allowed for the various necessary expenses of the family, and a reasonable amount left over to add to permanent capital. A friend of mine told me the other day that he knew of a man who had always been behind the game, who had adopted his first family budget last January, and who is already \$1,800 ahead of the game for this year.

### A Membership Goal of 200,000

The R. R. Y. M. C. A. now has a membership of about 145,000. To achieve the goal of 200,000 set for the drive next April, it will be necessary thoroughly to organize the forces at all of the local associations. The following suggestions for conducting a membership drive are combined from independent reports which were made by several R. R. Y. M. C. A. secretaries, including R. D. Emrick, Altoona, Pa., G. H. Winslow, Washington, D. C., and A. P. Gillette, Boston, Mass. The date for the membership promotion drive will be April 23-30.

Where organized teams are used with a local campaign slogan and the team captain is clever enough to get his men to do teamwork with the slogan fairly permeating each worker, it is safe to say the campaign will be a success.

For several years it has been the desire to eliminate the thought of commercially selling the Y. M. C. A. privileges, but rather that the men might join the Association as they do other organizations, not simply for a period of one year but permanently. The annual dues should be paid on a certain date and all dues should be made payable at one time. This idea was taken up several years ago by two or three associations and was found to work to advantage. After considering the question among the International Secretaries of the Railroad Department, it seemed advisable a little over two years ago to call the associations in conference and discuss the question of such work being undertaken simultaneously by all of them. In the six conferences that were held in different sections of the country, the idea met with hearty approval; the first Membership Week for united effort on the part of Railroad Associations was set for May 18-24, 1919.

The first campaign in 1919 was put over with such success that it was voted the next year to continue, and it has now become a fixture with nearly all of the Railroad Y's. The membership the first year increased from 90,000 to 125,000; the second year to 145,000. The simultaneous effort gives a much larger amount of publicity than could be given by each Association working independently, for the same action at the same time and the same objective makes the railroad man hear about the Association wherever he may happen to go.

A color scheme has been adopted in connection with this unity of action, whereby the associations can tell at a glance whether the ticket is up to date or not; this is a big advantage to the associations, particularly those that are centrally lo-

cated and have many members of other associations visiting them.

An efficient organization must be effected well in advance of the time the plan is to be put into operation. This organization should include in its membership the very best men in the community—men of high standing, energetic action, and a credit to the association. Various methods are employed in presenting this work to the men. A number of schemes include the names "Change Your Heart," "Base Ball Leagues," "Army and Navy," "Add a Mile," and other plans that will attract the men locally. It is generally conceded that a good-natured contest without prizes will cause an active rivalry, and the men usually reach the goal they set for themselves, and in many instances far surpass the goal. The sides as a rule are divided into different sections called teams, with a captain, or manager, or an army officer, at the head of each side, all heading up in a general committee with a president, or general manager, at the head of the organization. The interest is often kept alive during the week by daily meetings, with or without lunch, to which the reports are submitted by the teams.

Where a large organization is necessary, it is better to have fewer teams, with a greater number of workers on each team divided into divisions with a division leader reporting to the team captain. The fewer teams, the greater or keener the competition. It is a good plan to cover each department or division with one or more workers from each team. After all there is no secret in how to get new members or renewals, it is simply individual or team work, and friendly competition with a good supply of enthusiasm. When at all possible the campaign should start and finish with a get-together dinner of all workers and in case interest lags the workers should be called together for a mid-campaign dinner, when they may be recharged with inspiration. The method of reporting should be the one most convenient to the workers. As in all successful campaigns, the slogan of every team should be, "Rules of the campaign obeyed and every man a worker."

It is evident that only men who are willing to actively participate by giving time and thought to this work should be used. All the safe and sane publicity should be given through newspapers, placards, fliers, and the "whispering campaign." It would be well if every association can get a good publicity newspaper man interested during this week. Wherever time allows, four-minute men should be set to work.

Some of the results of this annual campaign are:—

(1) It has been proven that the men who comprise the membership are equal to hard tasks and are willing to undertake them when asked for definite work for a definite purpose at the definite time. If every secretary who has learned this fact will retain continued co-operation of these workers in carrying out the extension program in assimilating the new members and applying the same principle of definiteness to all committee work there will be a great strengthening of the brotherhood.

(2) The number of members secured is not more important than the effect upon the workers who secured them. Many men whose interest in the Association was confined principally to the local work have come to look upon it as a world-wide brotherhood of which they are a part. Those who previously said they could not do membership work became successful in presenting the claims of the Association to their fellow railroad men, and in securing their co-operation.

(3) Through the splendid uniform advertising matter and businesslike system of securing returns, the confidence of the workers and railway officials was established in the undertaking, and through the helpful publicity given by the press, the public has become acquainted as never before

with the important work the Railroad Department is accomplishing for railroad men.

(4) It places the Association on a footing with other organizations for continued membership.

(5) It makes an intensive campaign for a week and assures a large amount of the budget in advance.

(6) It gives an approach for the secretarial staff to the men in a peculiar way because of the organized effort that has been put in operation in interesting the men. The membership work is cleaned up in a short period, with the exception of new men coming to the town through the year, thus allowing more energy to be put into the other departments of the Association work during the rest of the year.

### Promotion of Health

May 9-15 has been set aside as the time for special consideration of a program for the promotion of health. The International Committee has based its suggestions for the health program on a special report made by Dr. John Brown, Jr., an abstract of which follows:—

Health and happiness go hand in hand. Both are not only within the reach of, but are characteristics of normal men. In a very real sense the crying need of the world today is for real Christians, because only men who have a true conception of their proper relations to God and their fellow men rightly regard the importance of attaining and maintaining maximum physical efficiency.

Too often we have endeavored to impress boys and young men with the fact that they should keep their bodies clean by quoting the Scripture: "Know ye not that ye are the temple of God and that the spirit of God dwelleth in you? If any man defile the temple of God, him shall God destroy, for the temple of God is holy, which temple ye are." This has been a negative appeal. Our challenge to men should be not only to keep themselves *clean* but *fit*, which is a far bigger thing. Only men who are physically fit can render their largest service to the Kingdom. With the former Scripture, we should couple Paul's injunction, "Neither yield ye your members as instruments of unrighteousness unto sin, but yield yourselves unto God as those that are alive from the dead, and *your members as instruments of righteousness unto God*. This is a positive, constructive appeal to men to always be at their best; to learn the fine art of right living and well-being, for the great purpose of being in fit condition to express themselves in Christian service.

Every man should have a great ambition to be well, to keep fit, to fight death and disease, to prolong life and increase physical well-being, thus combating misery, poverty, vice and crime. Men who are physically fit and who do not violate the fundamental laws of health are free from many temptations which beset men who do not keep themselves in good condition.

We are living on the health of our ancestors. What are we passing on to posterity? We must adapt ourselves to the new world and the new age. We despise the young college fellow who brags that he is "living on the old man," but in a far truer sense than any of us realize, we, too, are "living on our ancestors." How often we hear men excuse themselves for committing what they regard as unimportant indiscretions by saying, "This may not do me any good but at least it does not do me any harm," unmindful of the fact that many men seem for awhile to be violating minor and even major laws of right living without giving evidence of their harmful effects. It is because their ancestors lived simple outdoor lives, in accordance with the laws of health, that our unhygienic and artificial manner of living today does not produce immediate and disastrous results.

The lives of children yet unborn are doomed to be handicapped and shortened because of the thoughtless or selfish men and women who today are unwilling to order their lives

in accordance with the simple and known laws of right living, and who themselves are indebted to the clean, vigorous, wholesome and sacrificial lives of their ancestors for that measure of vitality which they now enjoy despite their own present manner of living.

Is it not fitting that those who today find it possible to survive in the face of rapidly changing conditions, should so live as to insure to their offspring the best that pure blood, fine constitution, organic vigor and mental vitality can hand down to posterity? Every man owes it to himself, his family, his employer and to society at large, to live at his best. Dissipation is not the necessary safety valve, but the unnecessary and wasteful leak by which energy and driving power is lost or misdirected.

It is a rather startling fact that at least 90 per cent of boys, young men, men in the prime of life and old men are physically much below par and are suffering from conditions which in the great majority of instances might easily be removed by the observance of very simple and well-known practices. Just stop for a moment and consider the number



Community Motion Picture Show, Duluth & Iron Range Y. M. C. A., Two Harbors, Minn.

of railroad men whom you know who give evidence of one or several of the following symptoms of being physically unfit: under weight (thin); over weight (fat); lack of "pep"; slowing up; tired feeling; headache; coated tongue; bad breath; indigestion; constipation; palpitation; short-winded; mouth breathing; frequent cold in the head; cough; stiffness in joints; sallow complexion; flabby skin; soft muscles; increasing nervousness manifesting itself in irritability, temper, lack of power of concentration, sleeplessness. This list of symptoms or "signals" does not refer to sick or invalid persons, but to individuals as we meet them every day.

The Railroad Y. M. C. A. has a real mission to arouse men and boys to the vital importance of every man studying how he can bring himself to that standard of maximum physical efficiency which is possible for him, not by doing those things which in his judgment "will do him no harm" but by the practice of those things and the establishing of habits which will do him only positive good.

Our message can only be effective if we ourselves are both healthy and happy. We should see to it that we get plenty of fresh air, drink lots of water, abstain from tea and coffee,

tobacco and pastries; greatly reduce the quantity of meat; eat plenty of fruit and vegetables, particularly green vegetables; supplement such exercise as we may get through our work by vigorous daily exercises calculated to suit our particular hygienic needs, and secure sufficient mental diversion, rest and sleep. Do not worry, be happy.

Shall we not give ourselves with greater earnestness to the service of railroad men through personal interviews, health education campaigns, distribution of literature and the organization of programs of recreation and exercise that will be real factors in laying sure foundations for manhood and thus develop strong bodies which shall make for health and happiness?

#### Putting Over the Program for Boys

In developing the following suggestions for boys' work in railroad communities, the International Committee is indebted to T. C. Straw, Haleyville, Okla.; Dwight Stamper, Decatur, Ill., and F. M. M. Richardson, International Transportation Department secretary.

Two fundamental facts have to be taken into consideration in working out the program for boys. The first of these is the pertinent fact that the Railroad Y. M. C. A. secretary is not a trained boys' work secretary. The second is even more obvious in that the Railroad Association building is not adapted to boys' work. Each of these conditions proves to be a point of strength in actual test. The first assures the absence of professionalism, and the second necessitates the finding of a place of meeting for boys and generally leads to the selection of the best of all places, namely, the homes of the railroad men of the community, where there are boys in those homes. Furthermore, these considerations both determine the general type of work to be projected and throw about that work elements that belong in the development of a normal boy's life.

With the essential facilities thus provided, the remaining elements are leadership and a program. The first is available in every community in the discovery of a Christian man with a normal love for boys. He may be discovered in any one of a dozen branches of railway service, or perhaps among the business or professional men of the town. Sometimes it is necessary for the secretary himself to lead the group the first year that a boys' work is operated, meanwhile training a leader.

The other element is a working program. This has been made available by the publication of the Association's text "Hand Book for Comrades" published as a part of its Christian citizenship training program. The leader of a boys' group will wish to supplement the Christian citizenship training program hand book with the "Leader's Manual." As he proceeds in the development of his experience in leadership of boys' groups, he will want "Boy Life," by Fiske, "Boy Behavior," by Burger, and "Boyology," by Gibson.

Perhaps the type of boys' work that the average Railroad Association can best put over is the Hi-Y club. In the name given the club by the boys themselves, the "Hi" is an abbreviation for high school and the "Y" stands for Young Men's Christian Association. This form of boys' work is not difficult to organize and requires little nursing, once it is well under way, because the very purpose of the club leads to the development of the dynamic within the club itself. In starting a Hi-Y Club, the selection of Christian leadership and a nucleus of the four or five key boys of the upper classes are essential. As character development is the ultimate aim with other things as by-products in the school life, the club hinges on Bible study as the basis of the group discussions.

As a practical result of the operation of Hi-Y clubs, high school principals everywhere testify that the clubs have cleaned up certain immoral practices in the social life of the school, or that it has cleaned up dirty athletics or succeeded

in cutting out dirty stories, and reduced the necessity of school discipline to a mere minimum.

Working boys are under-privileged. They respond to the challenge that among any group of them there is as much brains and capacity for leadership as among any equal number of high school boys. But they have a handicap of four or five fewer years of mental training in preparation for life. Do they use an opportunity to fit themselves for the very biggest chance that may come to them? They do. They respond to the challenge and the Railroad Association does not exist that can not discover the necessary leadership and bring these boys together in groups of the Association's Employed Boys' Brotherhood.

The work for the boys in the grades partakes of the nature of the work just described, but of course is adapted to the age of the boys. It varies with the season. The discussion groups in the homes or other selected places through the winter give place in summer to hikes with a purpose, gardening, organized play, and camping. The summer camp is frequently made the time and place to clinch the year's work through a decision of the boy regarding the course of his life.

This kind of boys' work is one that the Railroad Association can do in increasing volume. It pays in results perhaps more fruitful than any work attempted in the Association's entire program for men because it touches the boy in a plastic period of life and determines his usefulness to society. In one railroad community some of the boys who were club members while still in the grammar grades are now beyond the club age. Some are firing, others braking, others are in the offices, others are in the shop crafts.

One of these is the company's expert on castings in the store department. In the community he is an expert on boys. He teaches a boys' class in his church and leads a boys' club. Another is assistant teacher of a training group of boys' group leaders. Another is leading a group of fourteen young men in a training class to become teachers of boys' classes in the Sunday schools of the community. There is no measure to the possibilities of this work when once started.

One former club boy said to the Association secretary, "My experience in the work of our boys' club helps me now in my brotherhood." Perhaps his "experience" and the sane Christian principles inculcated through those discussions of social and economic questions from a Christian viewpoint, help him and his brotherhood and his company even more than he suspects. It is a work that pays.

### The Educational Program

Practical suggestions for the educational program were prepared for the International Committee by Roy V. Wright, managing editor, *Railway Age*, and included methods which different associations have utilized to advantage.

Many men holding important positions in railway service today pay a high tribute to the educational work which has been done in the past by the R. R. Y. M. C. A. I have in mind a foreman in one of our large railroad shops who came to this country 20 year ago, or more, with very little education and unable to speak the English language. He insists that he owes everything to the R. R. Y. M. C. A. because it taught him English, and then, through its mathematical and mechanical drawing courses, enabled him to qualify as a foreman.

Conditions have very greatly changed since those days. Now most of the railroads conduct apprenticeship courses and in many of our cities free night schools and other agencies are available for those who wish to complete their education in elementary subjects. While it is true that there is still a great need for this older type of educational work in many places, it is also true that if the R. R. Y. M. C. A. is to embrace its full opportunity it must in most cases vary

its program to meet new and changing conditions. In every case it is therefore advisable to make a careful survey of the railroad community to determine just what type of educational work will supply the greatest need. Obviously, no two points will require the same sort of program.

In the first place, it is important to realize that there is a fair percentage of men in every department of a railway who are ambitious to improve themselves and to prepare for promotion. An evidence of this is the fact that one of the first steps which was taken after the Erie Accounting Employees Association was formed was the appointment of an educational committee which would be helpful to its members in this way.

An example of what may be accomplished in this direction was the series of talks and discussions on departmental details and relations which was conducted by the Pennsylvania Railroad Branch Y. M. C. A. in Philadelphia during the early part of 1920. The chief purposes of these talks were:

"First: To acquaint employees in one department with the work employees in the same or other departments are doing, and why.

"Second: To emphasize those features of the detailed conduct of affairs where closer co-operation would be of assistance.

"Third: To provide a consolidated record, necessarily brief, but in sufficient detail to enable the reader to get a good idea of the functions of the departments described, from the originating to the concluding offices; and thus to see how his individual work affects the work of his fellow employees in other departments."

Fourteen lectures were given on successive Monday evenings. There was an average attendance of 300, and 1,500 different men attended the meetings at one time or another. The "Talks" were printed in individual pamphlet form and copies were furnished to those employees who registered for the course.

Similar courses on somewhat different topics were conducted at several division points on the Pennsylvania System, east of Pittsburgh, and a volume has been published giving the best thoughts which were developed in all of the talks on each subject. The subjects discussed in this system course were: The General Foreman, The Shop Clerk, The District Storekeeper, The Master Mechanic, The Motive Power Clerk, The Superintendent Motive Power, The Supervisor, The M. W. Clerk, The Chief M. W. Clerk, The Road Foreman of Engines, The Yard Master, The Division Operator, The Trainmaster, The Transportation Timekeeper, The Chief Passenger Transportation Clerk, and The Claim Agent. The chairman of the educational committee of the Pennsylvania Railroad Y. M. C. A. reports that there were 86 talks in all with a total attendance of 6,123 employees.

It may be suggested that while such a course could be promoted on a large system like the Pennsylvania Railroad it could not very well be successfully adapted to the smaller associations. There are very few terminals, no matter how small, where such a course of talks could not be arranged, even if some of the speakers had to come from distant points. Most railroad managements would undoubtedly be glad to co-operate in developing such a program. Smaller associations, however, have also actually demonstrated that it is possible to secure excellent results through what is known as discussion classes or open forums. These are adapted for small groups as well as large audiences and may be led by experts or by the men themselves. Such discussion may refer to subjects closely related to railroad operation, or they may include topics of more general interest. Where possible they should be supplemented, by reading courses. This means that the libraries and reading tables must be dusted off and should be supplied with books and magazines which relate themselves to the discussion courses. It is important to emphasize the fact that the selection of books and periodicals

should be left largely to the men themselves in order that their needs may be fully met. The kind of books that the men wish to read are not always those which the "Y" secretary or a committee of officials would select.

The New York Railroad Branch has a library of 26,000 carefully selected volumes. These are used by the resident members, but possibly the best use which is made of them is the fact that families in small villages and the country districts who do not have library privileges are furnished with books which are sent out by registered train mail. Many associations could follow this same practice and serve the railroad employees and their families in small communities and isolated districts with reading matter which would be very greatly appreciated.

A number of associations have done excellent work with educational motion pictures; one association reports a freer use of the reference library as a result. One association has interested a group of men in travel talks which are given by the men themselves and are illustrated by means of a reflectoscope and postal cards which the men gathered on their travels.

Not a few associations are doing excellent work by forming glee clubs, orchestras and bands. These not only make it possible for the men to develop their musical talents but are a great aid to carrying on association programs generally.

Possibly the most spectacular piece of educational work which has been done during the past year was the St. Louis Railroad Exposition. This was made possible by the co-operation of the St. Louis Railroad Club and the R. R. Y. M. C. A. at St. Louis; it included an exhibit of railway specialties and a lively program of educational and inspirational talks extending over an entire week. This exposition was fully described in the *Railway Age* of November 5, page 794.

In many cases and in large cities the R. R. Y. M. C. A. can co-operate with the city "Y" in promoting educational work. In all cases, however, it will be possible for the railroad branches to co-operate with the correspondence courses which recently have been inaugurated under the International Committee of the Y. M. C. A.

Last, but not least, it is important that any educational program should not overlook the necessity of educating members to the policies and work which is being done by the "Y" itself; its program is so large and widespread that it demands the intelligent support of every member of the organization.

### The Religious Work Program

This special report on the religious work program was prepared for the International Committee by Dean L. Brooks, general secretary, R. R. Y. M. C. A., Pittsburgh & Lake Erie, East Youngstown, Ohio.

The carrying out of a religious work program must first be actuated by an earnest desire on the part of the board of management and the secretarial force, and the program will be strong in just the proportion that the desire is strong on the part of those at the helm. Our membership readily detects insincerity and lack of interest on our part in this work. A religious work committee, when truly active, is of unestimable value.

The second step is a study of the field. It might be well to add here that there never was or never will be a railroad field in which some form of religious activity can not be carried on. Often we hear it exclaimed, "We have a peculiar field." "This thing and that thing is so entirely different from other fields. So impossible, so barren." "The men on our road are not susceptible to this sort of thing." Innumerable reasons are produced in an endeavor to prove that the absence of religious work in the field is entirely excusable. The person who makes these statements is short on either ambition or vision. Possibly both. There is not such a vast difference between the office man, the road man, and the shop man. They are all men after all.

Many mistakes are made in an endeavor to copy from the activities of another field which may differ greatly in general character, advantages, types of men, etc. This copy method frequently results in failure. The endeavor which is successful at Brownville often fails in Greenville. Rather we should "Spy out the land" carefully and prayerfully with the view of performing the service at hand regardless of whether it has the same luster and encouragement as that of the city or division point nearest us. In setting up a religious work program too many tasks should not be attempted the first year. The number of different activities should, of course, be governed by the size of the field, equipment, location, etc. In some instances a Bible class and a gospel meeting in the building is about all that can be successfully inaugurated the first year. In this case, work these two things, and work them hard. Make them strong and virile. The foundation is now laid. Build upon it the second year by adding a shop meeting, or boys' club, and so on. Above all things, avoid starting and stopping. Go through with it.

Lastly, deliver the goods. When you invite a man to a gospel meeting or Bible class, give him something. Don't

THE RAILWAY Y. M. C. A. AND ITS RELATION TO DIVISION AND TERMINAL POINTS ON THE RAILROADS OF NORTH AMERICA

State	No. of divisions and terminal points	No. of railroad association points	No. of unoccupied points
Alabama	5	2	3
Arizona	7	1	6
Arkansas	15	8	7
California	22	0	22
Colorado	12	3	9
Connecticut	6	1	5
Delaware	2	0	2
District of Columbia	1	1	0
Florida	10	1	9
Georgia	11	2	9
Idaho	4	1	3
Illinois	41	20	21
Indiana	22	8	14
Iowa	16	2	14
Kansas	22	8	14
Kentucky	26	8	18
Louisiana	10	0	10
Maine	7	4	3
Maryland	5	5	0
Massachusetts	12	4	8
Michigan	15	4	11
Minnesota	12	4	8
Mississippi	17	2	15
Missouri	22	6	16
Montana	11	1	10
Nebraska	8	3	5
Nevada	13	0	13
New Hampshire	2	1	1
New Jersey	9	7	2
New Mexico	7	2	5
New York	42	35	7
North Carolina	9	3	6
North Dakota	5	0	5
Ohio	33	21	12
Oklahoma	11	3	8
Oregon	7	1	6
Pennsylvania	47	42	5
Rhode Island	1	0	1
South Carolina	5	1	4
South Dakota	12	0	12
Tennessee	19	6	13
Texas	36	11	25
Utah	7	1	6
Vermont	8	1	7
Virginia	25	13	12
Washington	11	1	10
West Virginia	21	11	10
Wisconsin	16	3	13
Wyoming	11	1	10
Canada	72	21	51
Total	770	284	486

fool him. Don't tell him you are to hold a religious service and then have some good brother stand before him and carefully dodge the real issue by giving a genteel talk on the virtues of the daisy. This same man will measure your religious life and the association by the type of meeting you advocate. One evening last winter Judge Anderson came to us at East Youngstown. The Judge is past the three-score-and-ten mark. His hair is long and white. His shoulders are slightly bent. A fire burned in his dark brown eyes and there was a tremor in his deep bass voice. Seventy-five men crowded into the library; it was very quiet as the Judge pointed them to the Christ. The Bread of Life was broken

that night. The men came; they saw and heard a Man of God. Men will always come where there is a message. Let us "deliver the goods."

### A Large Field for Extension

In a discussion of a need for the expansion of the work, the data given in the table on the preceding page was presented by E. L. Hamilton, senior secretary, transportation department, Y. M. C. A., and his associate, H. O. Williams:

One of the tables shows clearly the rapid rate at which the R. R. Y. M. C. A. has grown since 1899:

GROWTH OF R. R. Y. M. C. A. SINCE 1899					
	Membership	Beds	Meals, lunches served in year	No. in Bible study classes	Number in gymnasium classes
1899-00...	36,000	320,000	997,654	2,833	.....
1904-05...	73,000	1,100,000	2,776,200	4,183	.....
1909-10...	83,500	2,200,000	4,930,130	7,100	3,700
1914-15...	90,000	2,720,000	5,412,000	10,100	7,600
1919-20...	145,000	4,000,000	10,100,000	7,100	11,000

### Tributes to George W. Stevens

The late George W. Stevens, president of the Chesapeake & Ohio, has always taken a great interest in the Railroad Y. M. C. A. and had expected to take a large part in the work of the Richmond conference. Hardly a session of the conference passed without some tribute being paid to him and on Sunday morning several hundred of the delegates marched from the convention headquarters at the Jefferson Hotel to the Hollywood Cemetery where touching services were held under the direction of Dr. John P. Munn, chairman of the Transportation Committee of the International Committee of the Y. M. C. A., and by H. O. Williams, associate senior secretary. About 25 years ago Hinton, W. Va., was one of the most difficult terminals on the Chesapeake & Ohio. In attempting to improve conditions, Mr. Stevens decided to install a Railroad Y. M. C. A. at that point. The results were so astonishing and followed so closely upon the opening of the building that Mr. Stevens gradually extended the work of the Railroad Y. M. C. A. until it covered every important point on the Chesapeake & Ohio.

### Other Features of the Program

Dr. John P. Munn, who presided over the conference, stated in his opening address that the conference was being held in the interest of the 3,000,000 men who are engaged in carrying on transportation throughout the world. No other group of men, he said, had so great an opportunity to add to the wealth and power of the world. The Railroad Y. M. C. A. is primarily designed to assist these men to develop better, stronger and fitter bodies, to help to educate them to have better and finer minds, and to assist them in appropriating and feeling the spirit which Jesus Christ came into this world to give. The distinct aim of the conference was to discover how the Railroad Y. M. C. A. might do still better and more effective work.

Governor Westmoreland Davis, of Virginia, referred to his early experiences as a railroad man and stated that the Railroad Y. M. C. A. is perhaps the only organization of its kind in which the greatest railroad president and the humblest employee of the great transportation industry can meet with perfect sympathy and on perfect equality.

Matt Flanagan, master mechanic of the Chesapeake & Ohio, spoke at the opening session upon the splendid effect of the noon-day shop meetings in the Chesapeake & Ohio shops.

Those who responded to the addresses of welcome were Hugh Allan, a machinist of the Canadian National Railways at Capreol, where the Government Railways of Canada recently opened the first Railroad Y. M. C. A. on its system; F. W. Brazier, assistant to the superintendent of rolling stock, New York Central, and J. H. Banks, state Y. M. C. A. secretary of Missouri.

The keynote address, after the organization of the conference, was made by John F. Moore, associate general secretary, International Committee.

On Thursday evening the field of the transportation department was outlined by John W. Cook, general secretary, Y. M. C. A., Brooklyn; C. V. Hibbard and Dr. George S. Webster, secretary, American Seamen's Friend Society, who spoke of the work in the marine department; T. J. Wheelright, president, Virginia Railway & Power Company, who told of the Y. M. C. A. work among street railway employees; C. C. Robinson, International boys' work secretary, Y. M. C. A., who emphasized the need of work among boys in railroad communities; and F. B. Shipp, general secretary, Y. M. C. A., Pittsburgh, who told of the breadth of the Y. M. C. A. movement.

At the second day's session an address was made by Dr. M. Ashby Jones, of Atlanta. Addresses were also made on Safety First by L. J. Bentley, chief safety agent, C. & O.; Americanization by E. D. White, assistant to the general manager, Union Pacific Railway, and there were short talks on The Association—A Common Platform, by Thomas B. Morton, chairman, United Shop Crafts, Richmond; Denny Hayes, engineer, Duluth & Iron Range, Two Harbors, Minn.; Fred Hand, engineer, Canadian Pacific, Chappleau, Ont.; H. L. Hernandez, Albuquerque, N. M., and George E. Chance, vice-chairman, O. R. T., Illinois Central, Mounds, Ill. L. C. Rowlett, a fireman on the Richmond, Fredericksburg & Potomac, presided at the session on Friday evening.

On Saturday morning the seven-fold simultaneous promotion programs were considered. During the afternoon of that day an excursion was made to Newport News and Hampton Roads. In the evening "The World Outlook and Outreach for Railroad Men" was presented by Dr. John R. Mott, general secretary, International Committee, Y. M. C. A.; Prof. Moises Saenz, president of the railroad and city Y. M. C. A., Mexico City; Wilbert B. Smith, international secretary for India; S. J. Chuan, a national secretary of China, and R. L. Dilley, who told of the corner stone laying for the first Railroad Y. M. C. A. building in Europe in Czecho-Slovakia.

On Sunday afternoon a mass meeting for men was held in the City Auditorium, Fred B. Smith speaking on "Moral Robbery." During the evening members of the conference made addresses at 26 of the church services.

One important factor in helping to make the conference a big success was the Delaware, Lackawanna & Western Y. M. C. A. glee club from Scranton, Pa. The musical program also included vocal selections by Norman Call, vice-president of the R. F. & P. The secretary of the conference was R. D. Rupp, assistant chief clerk to Vice-president Elisha Lee of the Pennsylvania Railroad. He was assisted by L. S. Erickson, Y. M. C. A. secretary, Concord, N. H.

THE SHOPS, like other branches of the transportation system, were turned back to their owners in a bad state of demoralization, so that a great amount of work has been contracted for outside. It has actually been found both cheaper and quicker to reconstruct equipment in other than the railroads' own shops. Under political administration of the railroads a repair shop appears to have been a good deal of a loafing place.—*Providence Journal*.

TRAIN DESPATCHERS AS SUBORDINATE OFFICERS.—The Interstate Commerce Commission has issued a revision of its order of November 1 defining "subordinate officials" to correct a typographical error in the definition of train despatchers that are to be designated as subordinate officials. As the order now reads these are to include "chief, assistant chief, trick, relief and extra despatchers, excepting only chief despatchers, who are vested substantially with the authority of superintendent or assistant superintendent."



New Y. M. C. A. Building Erected at a Locomotive Terminal

## The Locomotive Terminal As An Operating Factor\*

Organization, Supervision and Management, the Three Graces of  
Successful Terminal Operation

By L. G. Plant

Associate Editor, *Railway Age*

ANY CONSIDERATION of the locomotive terminal as an operating factor must take into account the organization of the terminal. This is just as essential in the make-up of the terminal as the physical equipment. In fact the usefulness of this equipment depends wholly upon the extent to which its potential possibilities are developed. The most elaborate terminal equipment will be of little value to the railroad if we do not have men who know how these facilities can be used to the best advantage and who are on the ground to see that the equipment is so used. Nowhere on the railroad will the lack of organization show up more quickly than at the locomotive terminal.

### Organization and Supervision

Supervision is an essential element in organization; we must not only have men who can execute repairs promptly and handle locomotives expeditiously but we must have men whose duty it is to see that these things are done. In this connection *we must clearly differentiate between mere system and organization.* What I wish to infer is that organization is more than a question of the number of supervisory officers, their titles or relative positions. It is entirely possible to have too many supervisors, as well as too few, to reach a point where the organization becomes top heavy and each man becomes a cog in the wheel rather than an individual unit. It is particularly essential in terminal operation that individual initiative be fostered and that each foreman's authority and responsibility be as broad as possible.

The roundhouse foreman's position is not an office job and unless he is a live wire who is on the job every minute of the day and has the entire situation constantly at his finger tips, we cannot expect 100 per cent service no matter how elaborate the equipment. In this fact lies the only explanation

I can offer for the phenomenon which we have all witnessed wherein the results obtained in a poorly equipped enginehouse with some "boomer" foreman are found to surpass the performance of a far better equipped terminal operating under the direction of a far more elaborate complement of supervisors.

The problem of getting and holding the type of men most needed for terminal operation is a serious one. When the railroad is fortunate in finding such men it must deal wisely and liberally with them. The proper course would be to develop material from within the ranks and it is not improbable that within a short time the railroads will see the wisdom of establishing central schools in which prospective foremen can be taught the rudiments of foremanship and be carefully examined in regard to all the details with which they should be familiar.

This is by no means a radical step. Many industrial concerns have already inaugurated such steps and every important mineral state in the union has long required just such preliminary training of every mine foreman. This is primarily a safety measure but every foreman who has passed the state examinations receives a certificate which in a sense establishes him in a career of permanent usefulness to the mining industry. We are prone to accept experience as the only teacher which can qualify us for railroad service and overlook the fact, as Benjamin Franklin expressed it, that "experience keeps a dear school." In the new era of intensive railroad operation, I do not know of any one field which offers more for the improvement of transportation than the education and development of personnel along broad lines.

### Locomotive Terminal Management

The problem of terminal management is very closely identified with that of organization because the strength of the organization depends greatly upon the character of the management. Constructive management can often develop ex-

\*This is the concluding portion of a paper delivered before the New England Railroad Club, November 9, 1920. The preceding sections were published in the November 19, and November 26 issues of the *Railway Age*.

cellent foremen out of the most unpromising material. On the other hand poor management which may be characterized by the lack of any broad fixed policy with respect to terminal operation or organization, or failure to set any standard of achievement to which terminal forces may aspire, may deprive the railroad of some of its best talent.

It should be the policy of every railroad to establish a positive standard for every terminal and it is the duty of the mechanical officers who are responsible for terminal performance to see that these standards are lived up to. There are very few men who will not do better work and more work when it is known that this work will be subject to the most detailed scrutiny by superior officers. No matter how competent the foreman, the operation of any terminal can be improved by keeping a close check upon its performance. It is in this connection that the full value of statistical control must be appreciated. While there are no statistics which can be relied upon to take the place of a first hand knowledge relating to the condition of motive power from a maintenance standpoint, there is no question but that the operation of the average terminal can be accelerated by means of a daily operating report, without in any way impairing maintenance. In many instances a close check on the performance of the terminal has resulted in speeding up the movement of locomotives across the ash pit, which is a clear gain so far as it concerns the time available for necessary maintenance.

The value of locomotive service hours and the performance of a locomotive terminal has long been appreciated by such men as N. D. Ballentine of the Chicago, Rock Island & Pacific and it is understood that the terminal performance of locomotives was subject to close scrutiny in Germany prior to the war. The fact that figures relating to the time locomotives are in service and are held at terminals are now common to all railroads is due to the inauguration of these statistics during the period of federal control and subsequent action by the Interstate Commerce Commission requiring that the railroads continue to submit reports showing the percentage of time locomotives are in service and are held at terminals.

#### Statistical Control of Terminal Operation

While it cannot be denied that compilation of this data for the Operating Statistics Section of the Railroad Administration, coming at the time it did, worked a very considerable hardship on many railroads which had few facilities available for assembling this information, it must also be admitted that it has given a tremendous impetus to the statistical control of terminal operations.

Based on the most recent observation, I feel safe in saying that the step inaugurated by Prof. Cunningham during the period of federal control has worked a veritable revolution in locomotive terminal management. When we find a superintendent of motive power scanning daily a statement of the average time it took to put engines over the ash pit and the time that these engines were held in the enginehouse at each important terminal on his railroad; or when a master mechanic says that the reports he receives from all terminals under his jurisdiction have enabled him to correct a bad situation at certain outlying points; or when a roundhouse foreman who is required to make a written explanation for a delay exceeding two hours over the ash pit, or five hours in the house, admits that this has caused him to pick up many loose ends; then we must concede that such statistics are a vital element in terminal management.

The objections which some railroads have raised against continuing the compilation of important figures relating to terminal operation are not well founded. We must look forward and not backward. The aim should be to find a sensible and economical means of securing the essential facts. In some instances it may be found that the methods for com-

piling this data are clumsy or that the figures required from each terminal go into an absurd amount of detail. So far as compiling the figures relating to the serviceable time of locomotives as required by the Interstate Commerce Commission is concerned, I do not know of any more direct or economical means than the use of the locomotive time waybill as employed on the New York Central Lines and described in the *Railway Age* on July 30, 1920, page 190. The chief merit of the locomotive time waybill system lies in the fact that it involves only the most essential figures, that these figures originate directly at the source and must be fundamentally accurate, and that the centralized method of compilation is economical.

#### Timing Locomotive Movements

The locomotive time waybill is about the size of a post card and one of these cards follows the movement of every locomotive from terminal to terminal. The first entry on the waybill is made by the engine despatcher at the terminal from which the locomotive is to depart and states the time at which the locomotive is available for service. The second entry is made by the engineman and records the time that the locomotive is delivered to him. The engineman retains the card and later enters the time at which the train left the yard and subsequently the time at which the locomotive reaches the terminal at its destination. The card is held at this terminal until this same locomotive is again ready for service. The time at which the locomotive is again ready for service constitutes the final entry and is also used as an initial entry for the following card. Each succeeding card thus covers a complete cycle of locomotive events.

To insure a complete report, the cards are first delivered to a number of checkers who make sure by means of a tally sheet that an unbroken sequence of waybills is received for each locomotive in active service. Having passed through the hands of the checker the cards are all forwarded to one general office where the first operation is that of computing the elapsed time between each operation as recorded on the time waybill. This operation is accomplished by skilled computers with remarkable rapidity and when all the figures have been entered on the card, the work of summarizing these time intervals is greatly simplified by the use of mechanical tabulating machinery.

While the system as described does not segregate the important movements about the terminal there is no reason why it could not be made to do so. In fact it is conceivable that the waybill could be entrusted to hostlers and that the movement onto the ash pit and across the turntable could be recorded by suitably located time clocks. As it is, these intra-terminal movements are recorded by a clerk at each terminal on the New York Central and on many other railroads and the daily reports based upon these figures are watched with keen interest by those responsible for terminal performance.

While the efficacy of reports dealing with the movements of locomotives at the terminals as a practical means for improving terminal operation has been questioned, mechanical department officers who are critically inclined should bear in mind that the results of such reports not only indicate enginehouse detention but all terminal delays, including those that are wholly chargeable to the transportation department. It cannot be denied, moreover, that statistics of this character have served to focus attention on terminal movements and bring about improvements that might otherwise have been overlooked.

Moreover, records of terminal movements have become very useful to progressive mechanical officers in demonstrating the relative efficiency of various features of terminal equipment. They have made it possible for a mechanical superintendent to estimate with reasonable accuracy the return that can be expected from an investment in a new ash pit or a boiler

washing outfit. Statistics have served to demonstrate the extent to which use is made of the facilities available and with the assurance that existing facilities are being utilized to the utmost limit, executives have been encouraged to spend money towards improving these facilities.

There is undoubtedly a growing appreciation of the fact that the locomotive terminal is in reality an operating factor, that a block in the terminal may mean a block on the main line and that co-operation between the mechanical and operating departments must be the keynote to terminal management. Mechanical officers must realize that in their connection with the movement of locomotives through the terminal they are operating men in every sense of the word. Also operating officials should appreciate the fact that the locomotive terminal is not purely a mechanical facility identified with locomotive maintenance but a very important link in their main line.

### Current Labor Conditions

It would be impossible fully to discuss locomotive terminal operation organization or management without giving more than passing consideration to the existing labor situation. Nowhere did the war work greater changes than in respect



Attractive Homes for Railroad Employees Adjacent to New Locomotive Terminal

to the relationship between employer and employee. Federal control has left many vexing problems to be solved and many trying conditions to be adjusted that vitally affect terminal performance. The only concrete suggestion that can be made relative to this situation is that mechanical officers should generally endeavor to adapt themselves to the changed conditions, rather than accept the limitations imposed.

I have in mind particularly the fact that flue blowers, engine watchmen and turntable operators are classed as labor and as such receive a lower wage than boilermakers' and machinists' helpers. These men have highly important functions to perform. Clean flues are absolutely essential to maximum locomotive capacity and efficiency. When you put a watchman on a modern locomotive remember that you are entrusting him with a \$75,000 investment. The whole operation of the terminal may be slowed down unless you have a quick and intelligent turntable operator. Mechanical men must not accept the limitations imposed by this situation; they must have first class men on these jobs irrespective of the wage.

The preparatory time that is now allowed to enginemen has not proved a handicap to the operation of locomotive terminals on all railroads. While allowance by the management of more than 30 minutes' preparatory time may place an unreasonable burden on the mechanical department, this situation may be met by delivering locomotives to enginemen in a prepared condition. The practice on one important railroad

is to deliver locomotives to enginemen on the train. An experienced engineman acting both as inspector and hostler places the locomotive on the train after making sure that the lubricator is filled and that the locomotive is in fit condition for the run. While it is appreciated that many railroads would prefer to have enginemen inspect and assume responsibility for the condition of their locomotive, this instance is cited as an illuminating example of the initiative that may be taken towards counteracting conditions that have been arbitrarily imposed.

We may, however, have some confidence in the fact that the railroad labor situation will tend toward improvement. A slackening in industrial activity will certainly tend to enhance the desirability of railroad jobs and consequently improve the quality and quantity of work which we may expect from the individual worker.

### Terminal Welfare Work

In reviewing the equipment of a locomotive terminal it is entirely proper to include those features which tend to enhance the comfort of enginemen, particularly at outlying terminals. It is in reality as much a function of the terminal to keep the men in a fit condition for service as to maintain the locomotives in a serviceable condition. *Any terminal that does not provide clean, comfortable lodgings and good wholesome food, falls short of its real objective.* The railroad that will assign this function to a cheap news company concession is at once waiving a moral obligation and overlooking one of the very best opportunities available for improving its service.

In the execution of this function the Railroad Y. M. C. A. has a tremendous advantage because it has something more to offer than physical comfort and because its service is actuated by motives that are above material profit. There is a growing appreciation of the extent to which the Y. M. C. A. can make the terminal a truly successful operating factor but the railroads as a whole have not responded in any adequate degree to the necessity for suitable facilities for this agency.

Any discussion relating to the welfare of employees at railroad terminals would be incomplete without some reference to the operation of the Harvey houses at all important terminals on the Santa Fe. While this is simply a meal service, the basis on which it is available to employees, the splendid character of the service rendered and the clean, wholesome atmosphere of this institution, established a standard that might well be emulated by every railroad in the country. Further consideration of this interesting phase of the subject suggests a word in regard to housing conditions surrounding the locomotive terminal. One of the most pleasing features in connection with the extensive terminal development which has been referred to in this paper is the development of a very attractive suburban cottage community in the immediate vicinity of the terminal. New projects should be located, if practicable, so as to make this possible and it is not too much to say that under certain conditions the railroad should participate in the development of suitable housing conditions adjacent to the terminal.

### Terminal Development Policies

In conclusion something should be said in regard to the policies that should be adopted toward locomotive terminal development. Being firmly convinced of the importance of the locomotive terminal as an operating as well as a maintenance factor on the railroads, it would appear to be the duty of every mechanical officer responsible for the performance of locomotive power to urge upon his superior officers the necessity for adequate terminal development.

It should be the policy of the railroads to maintain a proper relationship between locomotive and locomotive terminal development based on the safe assumption that the full value of

a modern locomotive can never be realized in an antiquated terminal. One railroad might be cited as having made a conspicuous success of Mallet locomotive operation over long operating divisions because the terminal facilities were equal to the burden and because the terminal organization was trained to the task. On another railroad the absolute failure of well-designed Mallet locomotives can be ascribed largely to inadequate terminal facilities and lack of terminal organization.

If the problem were always as plainly understood it would not be so difficult to develop a proper policy. As it is, terminal development calls for foresight and the most discriminating judgment. Every expenditure for terminal improvement should conform to a broad, comprehensive plan embracing ultimate terminal development so far as this can be forecast. The erection of an expensive concrete coaling station at some point where other facilities are inadequate and where terminal development along other lines must always be

## Car Loading Shows Further Decrease

WASHINGTON, D. C.

THE NUMBER OF CARS loaded with revenue freight, as reported to the Car Service Division of the American Railway Association, showed a further decrease during the week ended November 20 to 880,528. This was a reduction of 39,000 as compared with the preceding week and 130,000 as compared with the peak week of this year, that ending October 23. It was, however, greater than the total for the corresponding week of 1919, which was 854,601, or for 1918, which was 857,377. Last year the total loading was reduced by the coal strike and in 1918 there was a reduction both on account of the influenza epidemic and on account of the general falling off of traffic after the armistice. Coal loading this year was 90,000 cars greater than for the corresponding week of 1919. The report for the week is summarized as follows:

REVENUE FREIGHT LOADED AND RECEIVED FROM CONNECTIONS															
Summary—All Districts, Comparison of Totals This Year, Last Year, Two Years Ago. For Week Ended Saturday, November 20, 1920.															
Districts	Year	Grain and grain products	Live stock	Coal	Coke	Forest products	Ore	Mdse. L. C. L.	Miscellaneous	Total revenue freight loaded			Received from connections		
										This year 1920	Corresponding year 1919	Corresponding year 1918	This year 1920	Corresponding year 1919	Corresponding year 1918
Eastern .....	1920	5,611	4,088	53,935	2,395	6,590	5,266	47,518	78,825	204,228			230,094		
	1919	7,429	4,341	33,075	3,517	7,644	3,522	31,773	111,179		202,480	209,953		227,839	238,954
Allegheny .....	1920	2,896	4,296	63,547	5,959	3,872	8,275	38,083	62,525	189,453			130,555		
	1919	3,605	4,178	36,314	3,957	4,917	6,317	44,386	75,176		178,850	192,085		128,286	168,755
Pocahontas .....	1920	127	176	21,074	1,478	825	211	2,438	5,116	31,445			14,932		
	1919	211	258	25,551	1,450	1,336	394	135	9,168		38,505	37,655		20,707	24,169
Southern .....	1920	2,643	2,466	30,586	1,251	16,527	2,804	37,339	35,599	129,215			66,903		
	1919	3,398	3,276	10,998	170	18,574	2,774	19,018	59,925		118,133	118,848		75,426	73,984
Northwestern ...	1920	12,192	11,001	12,463	1,454	14,615	17,480	27,713	30,980	127,898			52,082		
	1919	12,849	12,182	13,174	775	14,679	15,545	22,245	43,855		135,304	122,628		55,732	72,415
Central Western..	1920	9,279	15,510	26,888	562	4,530	2,807	30,242	42,500	132,318			62,532		
	1919	12,457	17,938	6,172	506	5,231	2,786	23,939	52,828		121,857	118,153		70,382	61,436
Southwestern ...	1920	3,694	2,890	7,829	160	7,801	166	16,589	26,842	65,971			48,208		
	1919	4,521	3,873	1,510	108	7,135	323	15,116	26,886		59,472	58,055		50,867	45,615
Total all roads.	1920	36,442	40,427	216,322	13,259	54,760	37,009	199,922	282,387	880,528			605,306		
	1919	44,470	46,046	126,794	10,483	59,516	31,663	156,612	379,017		854,601			629,259	
	1918											857,377			685,145
Increase compared	1919			89,528	2,776		5,346	43,310		25,927					
Decrease compared	1919	8,028	5,619			4,756			96,630				23,953		
Increase compared	1918									23,151					
Decrease compared	1918												79,839		

L. C. L. merchandise loading figures for 1920 and 1919 are not comparable as some roads are not able to separate their L. C. L. freight and miscellaneous of 1919. Add merchandise and miscellaneous columns to get a fair comparison.

limited, illustrates a pitiful lack of foresight. While the locomotive terminal cannot be regarded as a suitable dumping place for worn out machine tools from larger shops, there can be little excuse for going to the other extreme and buying a wheel lathe for terminal use that will turn a pair of tires in 45 minutes when the maximum requirement at that terminal will seldom exceed one set of tires per week. Undoubtedly many projects for locomotive terminal development are discredited by just such lack of foresight, or failure on the part of mechanical officers to comprehend the purely business viewpoint that in the last analysis must dictate every good move in the conduct of our railroads.

Looking into the future, it is reasonable to predict that terminal development will undergo greater relative development than any other phase of transportation. It is of the utmost importance to railway executives and the mechanical officers that they not only have the foresight to realize the extent to which terminal equipment must be rehabilitated and the organization strengthened but the courage to command a program that will make the locomotive terminal a successful operating factor.

J. L. ELDRIDGE, yardmaster of the New York Central at Mott Haven (New York City) and first grand vice-president of "The Railroad Yardmasters of America," has been appointed to represent that organization before the Railroad Labor Board, and has established headquarters at Chicago.

## Freight Car Accumulations

The accumulations of revenue freight cars under load in greater number than can be handled currently had been reduced by November 19 to 28,624, which is not only a lower figure than has been reported for any week this year but is less than for any week since the United States entered the war in April, 1917, with the exception of the period from February to July, 1919, when traffic was at a very low ebb. When the delayed loads are too numerous these figures represent a measure of the congestion, but a total as low as 30,000 to 40,000 is no more than is to be expected during any season of heavy business, because the railroads naturally cannot dispose of all cars offered to them at once. A large proportion of the cars included are held awaiting vessels for export or coastwise movement. The year 1920 began with an accumulation of 74,000 cars and for the week of February 20 this had been increased to 122,000. By March 26 the number had been reduced to 84,000 but the switchmen's strike resulted in an increase to 288,000 during the week of April 16, since when, as conditions have improved and the railroads have increased their efficiency, there has been a steady reduction.

The records of freight car accumulations of the Car Service Division of the American Railway Association, which under various forms of organization has been supervising car service matters since before the United States entered the war, go back to the week ending April 13, 1917. They show that

during the entire period, with the exception of the period of depression in 1919 already referred to, there has been an abnormal amount of congestion until about the first of September this year, when the accumulations were reduced to 64,000. For the week of April 13, 1917, the number of delayed loads was 109,000. For the week of July 20 that year it was as low as 64,000 and in the week of December 14, 1917, just before the government took over the roads, it was as high as 148,000. In 1918 the peak of accumulations was reached during the period of bad weather in February, when the total reached 206,000. During the week of August 2, 1918, it was as low as 29,000, but at the end of the year it had again increased to 44,000. In May, 1919, following the depression after the armistice, the accumulation figure reached the lowest point since the records have been kept, 20,000, but from that time on it steadily increased until February 20, 1920. The improved weather conditions in March brought a reduction until the switchmen's strike caused an increase of nearly 200,000 in two weeks. The total of 288,000 on April 16 was unprecedented and it was not until July that the accumulations were reduced to below 100,000. The improvement since that time has been rapid while the volume of freight handled steadily increased until the last week of October. At that time the accumulations had been reduced to 40,000.

### Cars Being Returned

Continued progress in "unscrambling" the freight cars that were pooled during federal control is shown by reports received by the Car Service Division of the American Railway Association for November 15. On that date 32.5 per cent of the freight cars were on their "home" lines, an increase of 1.2 per cent, or about 28,000 cars, since November 1. On March 1, when the railroads were returned, only about 29 per cent of the cars were at home.

Now that the car shortage is giving way to a car surplus all orders of the Car Service Division for the movement of box cars have been completed or cancelled. A circular issued to the railroads says, "it is believed that the normal return of cars to owners in the manner provided by car service rules will satisfactorily meet all current requirements."

"Present transportation conditions afford an unusual and timely opportunity to promote the movement of cars to owners, as repeatedly urged by the executives. Indications are that the present lull in demand for cars is only temporary. An increased percentage of home cars on line will permit repairs and rebuilding of equipment to meet a later increase in the demands for transportation, and it is of great importance that all roads co-operate fully to attain these results. To this end liberal and effective compliance with obligations of all to the handling of cars under the Car Service Rules is essential."

W. C. Kendall, manager of the Railroad Relations Section of the Car Service Division, has gone to Cuba, accompanied by J. P. Beckwith, vice-president of the Florida East Coast, to investigate the reasons for the failure of the Cuban lines to return promptly to the United States cars which are moved to Havana over the Florida East Coast car ferry. The Florida East Coast has been considerably handicapped by the delay in the return of these cars, of which 500 or 600 have been kept tied up in Cuba.

Because of the general easing up of the car situation, the Car Service Division is making some reduction in its force and consideration is being given to a possible reduction in the local committee organization.

The percentage of bad order freight cars, which for the month of September was 7.2, had increased by November 15 to 7.7, according to reports received by the Car Service Division. This is a total of 174,189 cars. The percentage of gondola cars in bad order was 7.7 and of box cars 7.6.

For the week ending November 22 the car surplus was

almost as great as the car shortage, 32,368 as compared with 19,865 the week before. The car shortage was 30,724 as compared with 35,356 the week before. The surplus was largely in the west and included 22,000 box cars, while the shortage included 16,000 coal cars.

On November 15 the roads in the Eastern district had on their lines cars equal to 94.5 per cent of their ownership; the Allegheny district 97.2 per cent; the Pocahontas district 80.8 per cent; the Southern district 89.8 per cent; the Northwestern district 99.5 per cent; the Central Western district 97.9 per cent, and the Southwestern district 96.5 per cent.

The Car Service Division has issued the following summary of general conditions as of November 26:

**Box Cars**—Car supply for grain loading generally satisfactory, except for certain points in the Northwest. On practically all roads there is a sufficient supply of box cars for ordinary loading. The movement of cars to western roads on relocation orders has entirely ceased. The delivery of cars to home roads is increasing, thereby providing an opportunity for making needed repairs and getting a suitable supply of good order cars for the heavier demands that will undoubtedly follow the turn of the year.

**Auto Cars**—The demand for automobile cars is more than sufficient to employ the supply being made available by return to home roads. Cars should continue to be loaded to auto-manufacturing territory, but need not be moved empty except under Car Service Rules or when specifically ordered. It is important to avoid using automobile cars for cement, flour or other commodities that leave a residue in the cars that will damage the finish of automobiles when later used for that loading.

**Stock Cars**—Demand continues heavy at many points, and efforts must be continued to move cars to owning lines and in accordance with specific orders issued for equalization or relocation.

**Refrigerator Cars**—There is an unusually heavy demand and consequent general shortage of refrigerator cars, particularly pronounced in Maine and other eastern territory. Fruit and vegetables continue moving in considerable volume in the East and Middle West. Citrus fruit moving from Florida while not in same volume as during past seasons, is steadily increasing. All concerned should continue efforts to move refrigerators promptly.

**Open Top Cars**—In comparison with the first part of the month, the last half of November will, undoubtedly, show a slight increase in the production of bituminous coal, notwithstanding the non-productiveness of a considerable percentage of the mines on Thanksgiving Day. It is now estimated that the average weekly production for the month will hardly be below 11,700,000 tons. The coal situation has eased perceptibly during the past few weeks. On November 16th modification to Service Order 20 was made effective, releasing from preferential distribution for coal all flat bottom gondolas regardless of height. These cars are now being distributed for the transportation of commodities other than coal. This has resulted in relieving, to a considerable extent, conditions in the steel loading districts, where a large amount of mill products was stored awaiting transportation. The Interstate Commerce Commission also cancelled Service Order 21, effective November 24th, in view of the generally improved situation as regards fuel stocks at the plants of public utilities. Now that a large percentage of the open top equipment is available for distribution to commodities other than coal, such commodities are receiving greatly improved car service, and the issuance of special permits, which were formerly in effect under Service Order 20, has been entirely discontinued.

**Flat Cars**—Demand continues for flat cars in the Northwest territory and Southern states to protect shipments of logs and lumber. There is also a heavy demand for this type of equipment in the limestone district.

## Calculating Maintenance Allowance

THE RAILROADS have been engaged for some time in developing a method for determining a just allowance for maintenance of way and structures and for maintenance of equipment during the guarantee period and a subcommittee of the Adjustment committee for the carriers has been studying this problem for some time. This committee has recently developed some forms for compiling the necessary information and formulæ for effecting a determination of the allowance which have been incorporated in a 50-page report which it has recommended to the carriers for their consideration. The conclusions of the committee are based upon some fundamental principles summarized below.

In order that the guarantee may provide for the "same relative amount, character and durability of physical reparation" as one-half that of the annual test period average, it is necessary to measure that reparation and find its cost under the conditions which obtained during the guarantee period.

Under the provisions of the standard contract the test period is assumed to be a period of normal operation. Therefore, the relations of the materials used to all other operations must be considered as a normal one, so that the materials used are a measure of the physical reparation of that period.

If during the guarantee period an allowance is to be made for one-half the average annual physical reparation of the test period, and of the same relative "character" and "durability," that allowance must provide for the use of one-half the average annual test period materials and other operations, but under the conditions during the guarantee period.

While it is, of course, realized that the proposed formulæ, as applicable to the information readily available, do not produce results which are absolutely exact from a mathematical standpoint, they do, in the opinion of this committee, provide a method of determining in a practical way an allowance for maintenance during the guarantee period which is substantially fair and just.

The main classifications covered in the analysis made by the committee for maintenance of way and structures are: Section 1. Difference in cost of material. Section 2. Difference in cost of labor. Section 3. Composite equation factor for difference in cost of labor and material to be applied to total expenses. Section 4. Maintenance allowance for test period property and use. Section 5. Difference in amount of property maintained. Section 6. Difference in use of property if substantial enough to be considered. Section 7. Summary of allowances for guarantee period.

The method for determining the difference in cost of material (Section 1.) is given below and is typical of the methods used under the different heads listed above.

(a) Net material expense, one-half annual test period average	\$	_____
(b) Salvage credit, one-half annual test period average	\$	_____
(c) Gross material expense, one-half annual test period average, (a) plus (b)	\$	_____
(d) Factor for increase in cost of material	\$	_____
(e) Cost of test period gross material at guarantee period prices, (c) multiplied by (d)	\$	_____
(f) Actual gross material expense, guarantee period	\$	_____
(g) Actual salvage credit, guarantee period	\$	_____
(h) Ratio of salvage to gross material, guarantee period, (g) divided by (f)	\$	_____
(i) Proportional salvage credit, guarantee period gross material allowance, (e) multiplied by (h)	\$	_____
(j) Guarantee period allowance for material, (e) minus (i)	\$	_____

\*For the purpose of this computation, arbitrary prices applied to salvaged material used by the company should be at substantially the same ratio of the price of new material during the guarantee period as the average ratio of the arbitrary price during the test period was of the average price of new material in the same period.

The summary of allowance for the guarantee as provided for in Section 7 is obtained as follows:

(a) Two-thirds of maintenance allowance for guarantee period covering difference in cost of labor and material, adjusted for difference in amount of property maintained	\$	_____
(b) One-third of maintenance allowance for guarantee period covering difference in cost of labor and material, adjusted for difference in use of property	\$	_____
(c) Allowance for fire insurance and fire losses, actual in guarantee period	\$	_____
Total allowance for maintenance of way and structures	\$	_____

## Creation of National Boards of Labor Adjustment Opposed

THE CREATION of national railroad boards of labor adjustment, as advocated by railroad employees, is opposed in a resolution by the board of directors of the Chamber of Commerce of the United States, as not in the public interest.

The Transportation Act provides that the carriers and their employees may by agreement establish local, regional or national boards for settlement of all controversies, not directly involving wage disputes. Failure of the roads and their men to agree as to which of the three types should be set up has resulted in disputes remaining unsettled. The employees are united in advocacy of the creation of national boards. A majority of the carriers are for local boards.

"In the opinion of the board," says the resolution adopted, "the establishment of national adjustment boards as desired by representatives of the several organizations of the employees would tend to bring about a state of nationalization of the railroads of the United States, and eventually, to produce the same result in all industries, producing a constantly increasing cost of transportation and production, to the incalculable injury of the public at large and injuriously affecting both the employers and the employees, in the ultimate result.

"The functioning of such national boards of labor adjustment will inevitably lessen efficiency and impair the discipline necessary to the successful operation of the railways.

"Such national boards of adjustment will effectually prevent open shop operation, under which the employer and the employee may enter into and determine the conditions of employment relations with each other, and thereby impair the successful conduct and full development of the transportation systems in the first instance, and of all industrial establishments when this form of nationalization is extended to them, as will inevitably be extended in case it is established in connection with the railroad systems of the United States.

"The result of the operation of such national railroad boards of labor adjustment will make impossible intelligent and practical co-operation directly between employers and employees, based upon mutual recognition of their community of interest involved in the success of the particular railway or industrial establishment in which they are associated.

"This board is opposed to any procedure which now or hereafter will result in the establishment of national labor adjustment boards as advocated by the representatives of the several organizations of railroad employees."

A report of the chamber's railroad committee, which accompanies the resolution, points out that representatives of organized railroad employees are urging that there is power inherent in the Railroad Labor Board to create national adjustment boards, and to endow them with powers national in scope. This position is attacked by the railroad committee, which argues that failure to establish such boards by agreement renders nugatory provisions of the Transportation Act making possible their creation. So decidedly are the views of railroad officials and the representatives of organized railroad employees at variance as to the nature of the boards, there is small prospect, says the committee, of their being established by agreement.

A preamble to the resolution adopted by the board of directors says the public interest is involved in that no provision is made for public representation on the proposed adjustment boards. It points out that failure of the carriers and their employees to come to an agreement indicates that the two parties are not making every reasonable effort and are not adopting every available means to avoid interruption of the operation of the roads as was made clearly their duty under the Transportation Act.

## General News Department

**The San Diego & Arizona**, extending from El Centro, Cal., westward, 148 miles, to San Diego, was reopened for through service on November 25 after a blockade lasting more than six months, due to landslides in Carriso Gorge.

**Traffic density**, as reported by the Interstate Commerce Commission, has increased since the beginning of the year 1920 as follows (net ton miles per mile of road per day): January, 4,866; February, 4,901; March, 5,432; April (strike period), 4,120; May, 5,292; June, 5,531; July, 5,657; August, 5,995.

**The Pacific Railway Club**, at its December meeting at the San Francisco Commercial Club, on the evening of the 7th, will consider track maintenance and the use of motor cars in track maintenance work, with papers by W. H. Kirkbride, engineer maintenance of way and structures of the Southern Pacific, and Stephen Smith, of Fairbanks, Morse & Co.

**The Public Service Commission of New Hampshire**, in a communication sent to the Interstate Commerce Commission, giving views on the general railroad question, as affecting New England, says that the railroads might save much by rigid economy; and, in particular, by abolishing the practice of giving free passes to employees for pleasure travel.

**Nine robbers**, captured by the Pennsylvania Railroad police near Metuchen, N. J., on Saturday night, November 20, stole silk said to be worth \$50,000 from a freight train which had been stopped at a block signal station. One of the policemen was dangerously wounded, the robbers having been subdued only after a considerable pistol fight. The freight train was halted at a place where the line runs parallel to the highway, the robbers lying in wait with a five-ton motor truck. The policemen had been placed on the train as a special guard. The silk was recovered.

**The Baltimore & Ohio**, during the last four months, has specialized in unloading freight on Sunday in order to relieve the widespread congestion, and the reports for the seventeen weeks, beginning July 24 and ending November 14, show a total number of cars unloaded, on Saturdays and Sundays, of 119,232, as compared with a normal Saturday unloading of 73,601 cars. This is an increase of 45,631 cars, or 61 per cent. The heaviest two-days' record was on Saturday and Sunday, August 21 and 22, when the normal unloading being 4,401 cars, the actual number unloaded was 7,912, or an increase of 79 per cent.

**Government ownership** of the railroads as the best solution of the present situation was advocated by Joseph B. Eastman, of the Interstate Commerce Commission, in a speech before the Chamber of Commerce in Boston on Monday last. Mr. Eastman pictured the present situation of the railroads as "hedged in at every point by the appointees of the President of the United States," with the Interstate Commerce Commission fixing rates, controlling service, prescribing, accounting and supervising stock issues, the Railroad Labor Board fixing wages, and the Government taking profits in excess of 6 per cent. Both the danger and the attraction of railroad investments have diminished and the possibility of large speculative rewards has been all but eliminated. The crucial test of the present policy will come in securing capital.

### Correction

In the table of revenues and expenses given in the *Railway Age* of November 12 the operating expenses of the Chicago & North Western for October were incorrectly given as \$13,753,528. This should have been given as \$12,753,528 and the operating ratio as 75.29 instead of 81.19 per cent.

### Correction

In publishing the prize winning papers received in the contest on "Increasing the Average Miles per Car per Day" in the issue of November 12, page 824, the name of J. Bennett, winner of the second prize was incorrectly spelled J. Burnett. Mr. Bennett's article was entitled "Intensive Supervision Will Accomplish Results."

### October Earnings Short of Expectations

The October earnings of the railroads, as indicated by the reports that had been filed with the Interstate Commerce Commission up to Wednesday of this week, failed to show as much improvement as had been expected to result from the increases in rates. Total operating revenues of 129 roads operating 151,000 miles increased only 26.4 per cent as compared with 1919, although freight traffic for the month was approximately 10 per cent heavier than in October of last year and the increase in freight rates was estimated to average nearly 35 per cent for the country as a whole and passenger rates were increased 20 per cent, except in certain states. Passenger traffic was probably somewhat less than in October, 1919. Operating expenses of these roads, however, increased 29.5 per cent and the net operating income increased only 22 per cent as compared with October last year. In the Eastern district the roads reporting showed an increase in revenues of 33 per cent, while the Southern roads showed an increase of 20 per cent and the Western lines of 21 per cent. The 129 roads showed a net operating income of \$63,000,000. The large roads in October, 1919, had a net income of \$76,000,000 and to attain a 6 per cent return for a year the net income for October for all the large roads should be about \$112,000,000.

### Freight Operating Statistics

The Interstate Commerce Commission Bureau of Statistics has issued a summary of operating statistics giving a comparison of the principal items of performance for August, 1920, with August, 1919, and also for the eight months ended with August, 1920, with the corresponding period of 1919. It is observed that during the month the Class I roads produced, in exclusive freight service, 42,656,000,000 net ton-miles, which exceeds August, 1919, by 6,240,000,000 net ton-miles and, disregarding mileage reporting, the item exceeds August, 1918, by over four billions of net ton-miles. With mileage equated the increase over August, 1918, is slightly over two billions of net ton-miles.

"Compared with the same month last year, the statement says, August, 1920, reports show a percentage increase of 17.1 per cent in net ton-miles. Train-miles increased 15.4 per cent and loaded car-miles increased 9.8 per cent. The train-load increased 1.4 per cent and the car-load increased 6.7 per cent. The per cent of loads shows a decrease of 1.6 per cent and the car-miles per car-day increased 11.8 per cent.

The net ton-miles per car-day, the resultant of the carload, per cent of loads and car-miles per car-day increased 17.1 per cent. The cost per freight train mile of locomotive repairs, enginemen, trainmen, fuel, enginehouse expense and other locomotive and train supplies shows for the total an increase of 60.4 per cent. This abnormal increase is the result of wage increases; back pay due to the retroactive feature of the United States Railroad Labor Board's decision and other adjustments for account of the guaranty period; abnormally heavy repairs to locomotives; increased cost of fuel as well as materials used in repairs and also the fact that trains in August, 1920, were operated in larger units.

"Reports show that for the eight months' period ended with August, 1920, compared with the same period in 1919, net ton-miles increased 17.0 per cent. Train miles increased 15.4 per cent

and loaded car-miles increased 14.7 per cent. The train load increased 1.4 per cent and the carload increased 1.8 per cent. The per cent of loads increased 3.4 per cent and the car miles per car-day increased 8.7 per cent. As a result of the increases shown in the car-load, per cent of loads and car-miles per car-day, the net ton-miles per car-day increased 14.6 per cent. The cost per freight train mile of selected expense accounts referred to in the comparison for the month shows for the period an increase of 20.1 per cent over same period last year.

### Hearing on Security Issue

The Interstate Commerce Commission has announced a hearing at Washington on December 1 on a number of questions that have arisen in the matter of granting authority to carriers to issue securities pursuant to plans for reorganization or consolidation of the properties of common carriers as affected by Paragraph 6 of Section 5 of the Interstate Commerce Act.

The notice of the hearing says that questions have arisen, in cases not involving the consolidation of properties of carriers, as to the power and duty of the commission to authorize the issuance of securities of a total par value which would not be in excess of the total par value of outstanding securities and other obligations which it is contemplated will be funded, retired or replaced by, or upon, the issuance of the proposed securities, but which, if authorized and issued, would or might be of a total par value in excess of the total value of the property of the issuing carrier; and that questions have arisen, in cases of such proposed consolidations and in cases not involving such consolidations, as to the power and duty of the commission to authorize the issuance of securities to fund the par or other value of capital stock issued for a consideration less than its par value, discounts on funded debt, accrued interest or other fixed charges, operating losses and other items not represented by actual additions to the property, or contributions to the capital accounts of the carriers.

Copies of the order were served upon Alfred P. Thom, general counsel, Association of Railway Executives; and Bird M. Robinson, president, American Short Line Railroad Association.

### Railroad Wages and Railroad Bookkeeping

#### —Both in Need of Reform

Hon. George W. Anderson, of Massachusetts, judge in the United States District Court and former Interstate Commerce Commissioner, in a speech at Boston on Monday, last, denounced the present system of railroad wage rates as absurd and unjust, and called upon all interested to work for its correction. Speaking before a conference of commercial and railroad interests, called to take action to induce the Interstate Commerce Commission to "save the railroads and industries from ruin," threatened by the present financial condition of the roads, he condemned in strong terms "the absurd scheme of paying the same scale of wages all over the country, regardless of living conditions and of the amount of work required, to all men holding a job carrying the same name." He urged that inflexible standards of wages be abandoned, in the interests of the working men themselves, and characterized as absurd the labor unions' proposal to secure a standardization of working conditions. Labor must alter its policy in this matter, or the public must compel the Railroad Labor Board to alter it. It is a menace to the public interest.

Judge Anderson discussed the railroad problem generally, declaring that "railroading has been unbusinesslike because the bookkeeping of the railroads is the most elaborate and expensive and at the same time the most inadequate used in any great business in the world. \* \* \* There is no real cost accounting in railroad bookkeeping. It follows that most of our railroad men don't know when they are getting a new dollar for an old one. They never will until a radical change in the bookkeeping methods under which maintenance and depreciation, including obsolescence, are charged into annual expense accounts by units. These are but illustrative defects in a system generally bad. The artificial standardization of wages, on a mere money basis, that is regard-

less of money purchasing power in various sections and of the quantity and quality of service required of such employees as station agents and freight handlers in large overworked sections, as compared with the necessary labor at small stations in which the business is limited to two or three hours a day, cannot be justified."

He added, that "if a remedial adjustment cannot be speedily agreed upon, the responsibility should be brought home to the National Wage Board. \* \* \* Immediate relief from excessive and unsound taxation should at once be sought. Nothing could be more unsound than to tax railroads, which are highways, for the purpose of building granolithic roads to be torn speedily to pieces by auto trucks, many of which are carrying freight that ought to be borne on the rails."

### September Earnings and Expenses

The Interstate Commerce Commission has issued the following summary of revenues and expenses for September and nine months of 1920 for 187 class I roads and 14 switching and terminal companies:

Item	September		Nine Months	
	1920	1919	1920	1919
1 Average no. of miles operated..	235,539.52	234,228.56	235,070.72	234,068.52
Revenues—				
	Dollars	Dollars	Dollars	Dollars
2 Freight .....	437,657,926	346,668,124	3,020,499,131	2,580,390,101
3 Passenger .....	129,438,552	110,219,099	952,636,383	888,244,654
4 Mail .....	7,807,732	4,276,447	124,668,818	38,914,177
5 Express .....	11,358,508	13,136,634	115,303,143	83,570,640
6 All other transportation .....	16,175,869	11,639,359	111,457,498	91,950,260
7 Incidental .....	13,300,791	12,263,083	109,592,008	94,228,605
8 Joint facility—Cr.	674,475	606,674	5,675,649	5,065,590
9 Joint facility—Dr.	213,057	197,503	1,672,757	1,583,882
10 Railway operating revenues .....	616,200,796	498,611,917	4,438,159,873	3,780,780,145
Expenses—				
11 Maintenance of way and structures .....	95,133,358	68,968,508	789,378,021	574,908,182
12 Maintenance of equipment .....	134,146,605	125,597,397	1,164,759,669	887,160,290
13 Traffic .....	6,397,913	4,106,386	52,428,369	34,871,635
14 Transportation .....	256,013,823	186,814,010	2,107,404,902	1,587,003,299
15 Miscellaneous operations .....	5,392,428	4,338,676	45,877,695	35,226,806
16 General .....	14,796,443	10,513,452	124,133,722	92,691,395
17 Transportation for investment—Cr..	397,610	434,292	3,549,047	4,485,120
18 Railway operating expenses .....	511,482,960	399,904,137	4,280,433,331	3,207,376,487
19 Net rev. from railway operations.	104,717,836	98,707,780	157,726,542	573,403,658
20 Railway tax accruals .....	23,872,276	16,878,007	204,962,901	141,290,858
21 Uncollectible railway revenues..	79,028	70,418	799,510	563,074
22 Railway operating income .....	80,766,532	81,759,355	448,035,869	431,549,726
23 Equipment rents—Dr. balance....	3,516,590	2,248,875	22,933,195	15,988,714
24 Joint facility rents—Dr. balance....	1,939,631	1,861,758	16,432,986	13,216,846
25 Net of items 22, 23 and 24.....	75,310,311	77,648,722	487,402,050	402,344,166
26 Ratio of operating expenses to operating revenues, per cent.....	83.01	80.20	96.45	84.83

Note—(a) Federal lap-over items settled during the month are included in the above compilations for those roads that have indicated that estimates were not included for substantially all unaudited corporate items.

(b) To compare the earning power of the roads in 1920 with 1919, it should be noted (1) that the effect of rate increases on interstate traffic (Ex parte 74) is only partially reflected in September revenues, as, during the early part of September, a considerable proportion of the business handled was billed in August at the old rates; (2) that the revenues of all roads for the nine months of 1920 include approximately \$50,000,000 back mail pay; (3) that the corporate war taxes and organization expenses are not included in the 1919 returns; and (4) that September expenses include the current effect of the wage decision made by the United States Railroad Labor Board, as well as, in some cases, back pay resulting from said decision which was made retroactive to May 1, 1920. The amounts of back pay adjustments included in September expenses, so far as reported, are: Eastern District, \$1,706,348; Pocahontas District, \$139,771; Southern District, \$149,897; Western District, \$705,348; United States, \$2,701,364.

The amount of war taxes included in September, 1920, is \$3,465,271, and for period, March to September, 1920, \$23,765,784.

(c) Credit. (d) Debit.

## Meetings and Conventions

The following list gives names of secretaries, dates of next or regular meetings and places of meetings:

**AIR BRAKE ASSOCIATION.**—F. M. Nellis, Room 3014, 163 Broadway, New York City. Exhibit by Air Brake Appliance Association.

**AIR BRAKE APPLIANCE ASSOCIATION.**—Fred W. Venton, 836 So. Michigan Ave., Chicago. Meeting with Air Brake Association.

**AMERICAN ASSOCIATION OF DEMURRAGE OFFICERS.**—F. A. Ponticus, Supervisor of Demurrage and Storage, C. & N. W. Ry., Chicago.

**AMERICAN ASSOCIATION OF DINING CAR SUPERINTENDENTS.**—S. W. Derr, Philadelphia & Reading, Philadelphia, Pa.

**AMERICAN ASSOCIATION OF FREIGHT AGENTS.**—R. O. Wells, Illinois Central, Chicago. Next meeting June 20, 1921.

**AMERICAN ASSOCIATION OF GENERAL BAGGAGE AGENTS.**—E. L. Duncan, C. & E. I. R. R., 332 South Michigan Ave., Chicago.

**AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.**—W. C. Hope, C. R. R. of N. J., 143 Liberty St., New York.

**AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.**—J. Rothschild, Room 400, Union Station, St. Louis, Mo. Next convention, August 24-26, 1921, Kansas City, Mo.

**AMERICAN ELECTRIC RAILWAY ASSOCIATION.**—E. B. Buttritt, 8 W. 40th St., New York.

**AMERICAN RAILROAD MASTER TINNERS', COPPERSMITHS' AND PIPE FITTERS' ASSOCIATION.**—C. Borchardt, 202 North Hamlin Ave., Chicago, Ill.

**AMERICAN RAILWAY ASSOCIATION.**—J. E. Fairbanks, 75 Church St., New York. Next regular meeting, November, 1921.

Division 1, Operating (including former activities of Association of Railway Telegraph Superintendents).—W. J. Frapp (chairman), General Manager, N. Y. C. R. R., New York, N. Y.

Telegraph and Telephone Section.—H. Hulatt (chairman). Manager of Telegraphs, Grand Trunk. Exhibit by Railway Telegraph and Telephone Appliance Association.

Division 2, Transportation (including former activities of Association of Transportation and Car Accounting Officers).—E. J. Pearson (chairman), President, N. Y. N. H. & H. R. R., New Haven, Conn.

Division 3, Traffic.—Robert C. Wright (chairman), General Traffic Manager, P. R. R., Philadelphia, Pa.

Division 4, Engineering.—E. H. Fritch, 431 South Dearborn St., Chicago. Next annual meeting, March 15-17, 1921, Chicago.

Construction and Maintenance Section.—E. H. Fritch, secretary.

Electrical Section.—George Gibbs (chairman), Chief Engineer of Electric Traction, Long Island Railroad, New York, N. Y.

Signal Section.—H. S. Balliet, 75 Church St., New York. Next meeting, December 2-3, Hotel McAlpin, New York. Exhibit by Signal Appliance Association.

Division 5, Mechanical (including former activities of Master Car Builders' and Master Mechanics' Association).—V. R. Hawthorne, 431 South Dearborn St., Chicago. Next convention June 15-22, Atlantic City, N. J. Exhibit by Railway Supply Manufacturers' Association.

Equipment Painting Section.—V. R. Hawthorne, secretary.

Division 6, Purchases and Stores (including former activities of Railway Storekeepers' Association).—J. P. Murphy, General Storekeeper, N. Y. C. R. R., Collinwood, Ohio. Second annual meeting, June 20-22, 1921, Atlantic City, N. J.

Division 7, Freight Claims (including former activities of the Freight Claim Association).—Lewes Pilcher, 431 South Dearborn St., Chicago.

Division 8, Perishable Freight.—E. F. McPike (chairman), 431 South Dearborn St., Chicago.

**AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.**—C. A. Lichty, C. & N. W. Ry., 319 N. Waller Ave., Austin Station, Chicago. Next convention in New York City. Exhibit by Bridge and Building Supply Men's Association.

**AMERICAN RAILWAY ENGINEERING ASSOCIATION.**—(Works in co-operation with the American Railroad Association, Section II.) E. H. Fritch, 431 South Dearborn St., Chicago. Next annual meeting, March 15-17, 1921, Chicago. Exhibit by National Railway Appliances Association.

**AMERICAN RAILWAY MASTER MECHANICS' ASSOCIATION.**—(See American Railway Association, Division 5.)

**AMERICAN RAILWAY TOOL FOREMEN'S ASSOCIATION.**—R. D. Fletcher, 1145 East Marquette Road, Chicago. Exhibit by Supply Association of the American Railway Tool Foremen's Association.

**AMERICAN SHORT LINE RAILROAD ASSOCIATION.**—T. F. Whittelsey, Union Trust Bldg., Washington, D. C.

**AMERICAN SOCIETY FOR TESTING MATERIALS.**—C. L. Warwick, University of Pennsylvania, Philadelphia, Pa.

**AMERICAN SOCIETY OF CIVIL ENGINEERS.**—Col. H. S. Crocker (acting secretary), Engineering Societies Building, 33 W. 39th St., New York. Annual convention, August 10-12, Multnomah Hotel, Portland, Oregon. Regular meetings, 1st and 3d Wednesday in month, except July and August, 33 W. 39th St., New York.

**AMERICAN SOCIETY OF MECHANICAL ENGINEERS.**—Calvin W. Rice, 29 W. 39th St., New York. Next annual meeting, December 7-10, 1920, New York.

**AMERICAN STEEL TREATERS' SOCIETY.**—W. H. Eisenman, 154 East Erie St., Chicago.

**AMERICAN TRAIN DESPATCHERS' ASSOCIATION.**—C. L. Darling, Northern Pacific Ry., Spokane, Wash. Next convention, June 20, 1921, Kansas City, Mo.

**AMERICAN WOOD PRESERVERS' ASSOCIATION.**—F. J. Angier, B. & O., Mt. Royal Sta., Baltimore, Md. Next annual meeting, January 25-27, 1921, San Francisco.

**ASSOCIATION OF RAILWAY CLAIM AGENTS.**—Willis H. Failing, C. R. R. of N. J., Jersey City, N. J. Next meeting at St. Louis, Mo.

**ASSOCIATION OF RAILWAY ELECTRICAL ENGINEERS.**—Jos. A. Andreucetti, C. & N. W., Room 411, C. & N. W. Sta., Chicago. Exhibit by Railway Electric Supply Manufacturers' Association.

**ASSOCIATION OF RAILWAY EXECUTIVES.**—Thomas De Witt Cuyler (chairman), 61 Broadway, New York, N. Y.

**ASSOCIATION OF RAILWAY SUPPLY MEN.**—C. L. Mellor, 212 W. Illinois St., Chicago. Meeting with International Railway General Foremen's Association.

**ASSOCIATION OF RAILWAY TELEGRAPH SUPERINTENDENTS.**—(See American Railway Association, Division 1.)

**ASSOCIATION OF TRANSPORTATION AND CAR ACCOUNTING OFFICERS.**—(See American Railway Association, Division 2.)

**BRIDGE AND BUILDING SUPPLY MEN'S ASSOCIATION.**—A. J. Filkins, Paul Dickinson Company, Chicago. Meeting with convention of American Railway Bridge and Building Association.

**CANADIAN RAILWAY CLUB.**—W. A. Booth, 131 Charron St., Montreal, Que. Next meeting, December 14.

**CAR FOREMEN'S ASSOCIATION OF CHICAGO.**—Aaron Kline, 626 North Pine Ave., Chicago. Regular meetings, 2d Monday in month, except June, July and August, New Morrison Hotel, Chicago.

**CAR FOREMEN'S ASSOCIATION OF ST. LOUIS.**—Thomas B. Koeneke, Federal Reserve Bank Bldg., St. Louis, Mo. Meetings first Tuesday in month at the American Hotel Annex, St. Louis.

**CENTRAL RAILWAY CLUB.**—Harry D. Vought, 95 Liberty St., New York. Regular meetings, 2d Thursday in November and 2d Friday in January, March, May and September, Hotel Statler, Buffalo, N. Y.

**CHIEF INTERCHANGE CAR INSPECTORS' AND CAR FOREMEN'S ASSOCIATION.**—J. C. Keene, General Car Inspector, Wabash R. R., Decatur, Ill.

**CHIEF INTERCHANGE CAR INSPECTORS' AND CAR FOREMEN'S SUPPLY MEN'S ASSOCIATION.**—W. P. Elliott, Terminal R. R. Ass'n. of St. L., East St. Louis, Mo.

**CINCINNATI RAILWAY CLUB.**—H. Boutet, 101 Carew Bldg., Cincinnati, Ohio.

**EASTERN RAILROAD ASSOCIATION.**—D. G. Stuart, Washington, D. C.

**FREIGHT CLAIM ASSOCIATION.**—(See American Railway Association, Division 7.)

**GENERAL SUPERINTENDENTS' ASSOCIATION OF CHICAGO.**—A. M. Hunter, 321 Grand Central Sta., Chicago. Regular meetings, Wednesday preceding 3d Friday in month, Room 856, Insurance Exchange Bldg., Chicago.

**INTERNATIONAL RAILROAD MASTER BLACKSMITHS' ASSOCIATION.**—W. J. Mayer, Michigan Central R. R., Detroit, Mich.

**INTERNATIONAL RAILWAY FUEL ASSOCIATION.**—J. G. Crawford, 702 E. 51st St., Chicago. Next annual meeting, May, 1921, Hotel Sherman, Chicago.

**INTERNATIONAL RAILWAY GENERAL FOREMEN'S ASSOCIATION.**—Wm. Hall, 1061 W. Wabash Ave., Winona, Minn. Exhibit by Association of Railway Supply Men.

**MAINTENANCE OF WAY MASTER PAINTERS' ASSOCIATION.**—E. E. Martin, Union Pacific R. R., Room No. 19, Union Pacific Bldg., Kansas City, Mo. Next convention October 4-6, 1921, Buffalo, N. Y.

**MASTER BOILER MAKERS' ASSOCIATION.**—Harry D. Vought, 95 Liberty St., New York. Next convention, May 23-26, 1921, Planters' Hotel, St. Louis, Mo.

**MASTER CAR AND LOCOMOTIVE PAINTERS' ASSOCIATION OF THE UNITED STATES AND CANADA.**—(See American Railway Association, Division 5, Equipment Painting Section.)

**MASTER CAR BUILDERS' ASSOCIATION.**—(See American Railway Association, Division 5.)

**NATIONAL ASSOCIATION OF RAILROAD TIE PRODUCERS.**—E. E. Pershall, T. J. Moss Tie Company, 720 Security Bldg., St. Louis, Mo. Next annual convention, January 27-28, 1921, San Francisco.

**NATIONAL ASSOCIATION OF RAILWAY AND UTILITIES COMMISSIONERS.**—James B. Walker, 49 Lafayette St., New York.

**NATIONAL FOREIGN TRADE COUNCIL.**—O. K. Davis, 1 Hanover Square, New York.

**NATIONAL RAILWAY APPLIANCES ASSOCIATION.**—C. W. Kelly, Kelly-Derby Co., Peoples Gas Bldg., Chicago. Meeting with American Railway Engineering Association.

**NEW ENGLAND RAILROAD CLUB.**—W. E. Cade, Jr., 683 Atlantic Ave., Boston, Mass. Regular meetings, 2d Tuesday in month, excepting months of June, July, August and September.

**NEW YORK RAILROAD CLUB.**—Harry D. Vought, 95 Liberty St., New York. Regular meeting, 3d Friday in month, except June, July and August, 29 W. 30th St., New York. Annual Dinner, December 16, Hotel Commodore, New York.

**PACIFIC RAILWAY CLUB.**—W. S. Wollner, 64 Pine St., San Francisco, Cal. Regular meeting 2d Thursday in month, alternately in San Francisco and Oakland.

**RAILWAY ACCOUNTING OFFICERS' ASSOCIATION.**—E. R. Woodson, 1116 Woodward Bldg., Washington, D. C. Next annual meeting, May 11, 1921, Atlantic City, N. J.

**RAILWAY BUSINESS ASSOCIATION.**—Frank W. Noxon, 600 Liberty Bldg., Broad and Chestnut Sts., Philadelphia, Pa.

**RAILWAY CLUB OF PITTSBURGH.**—J. D. Conway, 515 Grandview Ave., Pittsburgh, Pa. Regular meetings, 4th Thursday in month, except June, July and August, America Club House, Pittsburgh, Pa.

**RAILWAY DEVELOPMENT ASSOCIATION.**—D. C. Welty, Missouri Pacific R. R., Little Rock, Ark.

**RAILWAY ELECTRICAL SUPPLY MANUFACTURERS' ASSOCIATION.**—J. Scribner, General Electric Co., Chicago. Annual meeting with Association of Railway Electrical Engineers.

**RAILWAY EQUIPMENT MANUFACTURERS' ASSOCIATION.**—D. L. Eubank, Galena Signal Oil Company, Richmond, Va. Meeting with Traveling Engineers' Association.

**RAILWAY FIRE PROTECTION ASSOCIATION.**—R. R. Hackett, Baltimore & Ohio R. R., Baltimore, Md.

**RAILWAY REAL ESTATE ASSOCIATION.**—R. H. Morrison, C. & O. Ry., Richmond, Va.

**RAILWAY SIGNAL ASSOCIATION.**—(See American Railway Association, Division 4, Signal Section.)

**RAILWAY STOREKEEPERS' ASSOCIATION.**—(See American Railway Association, Division 6.)

**RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.**—J. D. Conway, 1841 Oliver Bldg., Pittsburgh, Pa. Meeting with American Railway Association, Division 5.

**RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION.**—G. A. Nelson, Waterbury Battery Co., 30 Church St., New York.

**ROADMASTERS' AND MAINTENANCE OF WAY ASSOCIATION.**—P. J. McAndrews, C. & N. W. Ry., Sterling, Ill. Next annual convention, September 20-22, 1921, Chicago. Exhibit by Track Supply Association.

**ST. LOUIS RAILWAY CLUB.**—B. W. Frauenthal, Union Station, St. Louis, Mo. Regular meetings, 2d Friday in month, except June, July and August.

**SIGNAL APPLIANCE ASSOCIATION.**—F. W. Edmunds, Schroeder Headlight & Generator Co., New York City. Meeting with American Railway Association, Signal Section.

**SOCIETY OF RAILWAY FINANCIAL OFFICERS.**—L. W. Cox, 1217 Commercial Trust Bldg., Philadelphia, Pa.

**SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.**—A. J. Merrill, P. O. Box 1205, Atlanta, Ga. Regular meetings, 3d Thursday in January, March, May, July, September and November, Piedmont Hotel, Atlanta.

**SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.**—E. W. Sandwich, Western Ry. of Ala., Atlanta, Ga.

**SUPPLY ASSOCIATION OF AMERICAN RAILWAY TOOL FOREMEN'S ASSOCIATION.**—C. N. Thulin, Duff Manufacturing Company, 935 Peoples Gas Bldg., Chicago.

**TRACK SUPPLY ASSOCIATION.**—W. C. Kidd, Ramapo Iron Works, Hillburn, N. Y. Meets with Roadmasters' and Maintenance of Way Association.

**TRAVELING ENGINEERS' ASSOCIATION.**—W. O. Thompson, N. Y. C. R. R., Buffalo, N. Y. Exhibit by Railway Equipment Manufacturers' Association.

**WESTERN ASSOCIATION OF SHORT LINE RAILROADS.**—Clarence M. Oddie, Mills Bldg., San Francisco.

**WESTERN RAILWAY CLUB.**—J. M. Bytne, 916 W. 78th St., Chicago. Regular meetings, 3d Monday in month, except June, July and August.

## Traffic News

The Transportation Club of Louisville, Ky., will hold a dinner at the Pendennis Club on December 8.

The Traffic Club of New York held its annual meeting and dinner at the Waldorf-Astoria Hotel on November 23. The president for the ensuing year is R. J. Menzies. The next meeting of the club is to be held on Tuesday, December 28.

The Transportation Club of Peoria, Ill., will hold a dinner on December 9. The speakers will be Conrad E. Spens, vice-president of the Chicago, Burlington & Quincy, and J. H. Beek, executive secretary of the National Industrial Traffic League.

The Traffic Club of Chicago, at a business meeting on November 30, adopted a resolution protesting against any public adjustment board for hearing disputes between common carriers and their employees; and voted that copies of the resolution be sent to the presidents of the principal railroads.

So many newspapers have jumped to the conclusion that because the September earnings of the railroads were unsatisfactory the railroads were preparing to ask a further increase in rates, that President Willard of the Baltimore & Ohio has given a statement to the press explaining that the eastern railroads, at least, have no such intention. It is too early to determine the full effect of the rate increase. The thing to do is for the railroads to give the new rates a fair trial.

A practical training course in boxing and crating is being given at the Forest Products Laboratory, Madison, Wis. The object of this course is to demonstrate the principles that underlie proper box and crate construction and develop economical containers that will deliver goods to destination in a satisfactory condition at a minimum cost. The course lasts five and one-half working days. Only a limited number of men are accepted in a class, but the course will be offered as long as there is a demand for it. The next three courses are scheduled to start on January 10, March 7 and May 2, respectively.

The Commissioner of Internal Revenue has issued a revised ruling that the war tax on transportation applies to all services rendered, furnished or used in connection with the movement of persons and property by or on behalf of a carrier, including receipt, delivery, elevation, transfer and transit, ventilation, refrigeration, icing, storage, demurrage, towage, lighterage, trimming of cargo and vessels, wharfage, handling of property transported, feeding and watering livestock, and all other incidental services and facilities. In a previous ruling demurrage was not included.

The Traffic Club of Memphis, Tenn., at its annual banquet and election on November 20, elected J. M. Walsh, superintendent of the Illinois Central terminals at Memphis, president; C. F. Russell, assistant freight traffic manager of the Southern, first vice-president, and J. H. Townshend, secretary-manager of the Southern Hardwood Traffic Association, second vice-president. The directors are: J. M. Beley, A. M. Crawford, B. H. Wallace, R. E. Buchanan, J. B. McGinnis and H. W. Stigler. W. B. Ryan, assistant general freight agent of the Illinois Central, was elected treasurer, and L. E. McKnight, secretary, a position he has filled for three years. Among the speakers of the evening were Fred Collins, vice-president of the Bank of Commerce of Memphis; C. T. J. Mooney, editor of the Commercial Appeal, and A. H. Egan, general superintendent of the Yazoo & Mississippi Valley, all of Memphis.

At the annual election of officers of the Houston (Tex.), Traffic Club, J. F. Hennessy, Jr., division freight agent on the Missouri, Kansas & Texas, was elected president; I. R. Palmer, secretary and treasurer of the Trinity River Lumber Company, first vice-president; C. H. Pugh, general agent on the Missouri Pacific, second vice-president; S. J. Westheimer, president of the Westheimer Warehouse & Storage Co.,

third vice-president; E. L. Williams, traffic manager of the Southern Drug Company, secretary, and A. Kimbell, secretary of the Houston Drug Company, treasurer. Directors for the term expiring in 1921 are: Clint Hollady, president of the Bond & Hollady Transfer Company, and R. H. Carmichael, assistant general freight agent of the Southern Pacific. Directors for the term expiring in 1922 are: F. L. Bornefeld, city freight agent of the Atchison, Topeka & Santa Fe; E. C. Nicar, traffic manager of the Southern Motors Company, Ltd. The annual banquet of the club will be held on December 14.

The Chicago Shippers' Conference Association has been permanently organized, and it is affiliated with the Chicago Chamber of Commerce and the Illinois Manufacturers' Association. It is the purpose to consider general traffic matters of local interest to the shippers of Chicago and also to cooperate with the railroads in Chicago. The shippers' section of the Chicago Conference Switching Committee is now a part of the new association, and will act as the switching committee; the Chicago Industrial Claim Conference is also a part of this organization, and will be known as the claim committee. Other committees are to be appointed. The following officers were elected: J. J. Wait, chairman; J. A. Brough, vice-chairman; W. J. M. Lahl, secretary-treasurer. The directors are: Geo. A. Blair, J. S. Brown, Murray N. Billings, E. C. Wilmore, W. J. Womer, and C. T. Bradford. These officers and directors are to constitute the executive committee. Regular meetings are to be held on the first Tuesday of each month, except in July and August.

### National Industrial Traffic League—

#### The New Executive Committee

The names of the members of the new board of directors of the National Industrial Traffic League were given in the *Railway Age* of November 26, page 940, in connection with the report of the annual meeting of the League. The executive committee of the League, appointed by the board of directors, consists for the ensuing year of the following:

H. C. Barlow (Chairman), Association of Commerce, Chicago, Ill.  
J. M. Belleville (Vice-Chairman), Pittsburgh Plate Glass Co., Pittsburgh, Pa.  
W. J. L. Banham, Otis Elevator Co., New York, N. Y.  
W. S. Creighton, Charlotte Shippers & Manufacturers Association, Charlotte, N. C.  
R. L. French, Columbia Graphophone Mfg. Co., Bridgeport, Conn.  
J. C. Graham, Jackson Chamber of Commerce, Jackson, Mich.  
Carl Giessow, New Orleans Joint Traffic Bureau, New Orleans, La.  
J. P. Haynes, Traffic Bureau, Chamber of Commerce, Sioux City, Ia.  
F. S. Keiser, Traffic Commission of the Commercial Club of Duluth, Minn.  
C. D. Mowen, Fort Smith Traffic Bureau, Ft. Smith, Ark.  
H. Mueller, St. Paul Association, St. Paul, Minn.  
R. W. Poteet, Stanley Works, New Britain, Conn.  
Geo. P. Wilson, Chamber of Commerce, Philadelphia, Pa.  
J. S. Davant, Memphis Freight Bureau, Memphis, Tenn.  
C. O. Bergan, Spokane Merchants' Association, Spokane, Wash.

### Hearings on Pullman Rate Increase Postponed

Further hearings on the complaint of the United Order of Commercial Travelers and other organizations of traveling men against the 20 per cent increase in Pullman fares which went into effect on May 1 will be postponed until the rates have been in effect for a full year. This was requested by attorneys representing the commercial travelers at the conclusion of a hearing before Examiner Barclay of the Interstate Commerce Commission at Washington on November 29. The rates were attacked on the ground that the Pullman Company does not need the increase and that the prices of materials which enter into its expenses are falling, but after L. S. Taylor, vice-president of the company, had presented his evidence regarding the company's expenses and revenues, showing that the latter have been materially reduced during the past three months (since the 50 per cent surcharge went into effect) it was decided to postpone the case to await more definite information as to the trend of traffic and prices. It was stated, however, that the commercial travelers' organizations propose to file shortly a complaint against all the railroads, attacking the 50 per cent surcharge on Pullman fares, which goes to the railroads. The representatives of the Pullman company said that the surcharge had considerably reduced the number of passengers using its service.

### New York Fare Increases Delayed

Proposed increases in passenger fares in the State of New York, announced by several railroads last week, seem likely to be indefinitely delayed by suits for injunctions entered in the courts by state and city officers.

The decision of the Interstate Commerce Commission, authorizing the railroads of New York to advance passenger fares to 3.6 cents a mile, regardless of adverse action by the Public Service Commission or other officers of the state, required the railroads to take action on or before December 18; but the New York Central, the New York, New Haven & Hartford, the Long Island and some other roads, decided to file new tariffs to go into effect on November 29, this course being warranted by the decision of the United States Supreme Court in the case of the American Express Company versus Caldwell, 244 U. S. 617, in which it was held that the law requiring advances to be made only after 30 days' notice did not govern in cases where a carrier sought to make a change in rate in obedience to an order issued by the Interstate Commerce Commission to abate discrimination against interstate traffic.

On application made by the attorney-general of the state, the Supreme Court in Brooklyn, on November 26, issued a temporary injunction forbidding the enforcement of the higher rates on the Long Island road, and on November 29 the case was continued until December 11, the company being allowed until December 3 to submit its brief.

Proceedings concerning the rates on other roads are pending in court at Kingston, where a hearing will be held on December 4.

### Anthracite Shipments Cut By Strikes

The shipments of anthracite for the first seven months of the coal year 1920-21 (April 1 to October 31), as reported to the Anthracite Bureau of Information at Philadelphia, have amounted to 39,720,654 gross tons, as compared with 41,771,313 gross tons for the same period last year. The decreased tonnage this year was, as shown in the following table, due almost entirely to the outlaw railroad switchmen's strike in April, and to the vacation strike of the miners in September. The average shipments for the five normal months were 6,262,699 tons. The shipments in April fell below this figure by 1,448,486 tons, while the loss in September, due to the vacations, was 2,669,743 tons, so that the total shipments for the period are something over 4,000,000 tons below what they would have been except for these two unauthorized interruptions to regular production.

Shipments by initial carriers were as follows:

	April	May	June	July
P. & R.....	1,055,190	1,298,295	1,165,339	1,251,791
L. V. ....	898,929	1,130,707	1,150,977	1,217,642
C. of N. J. ....	305,465	483,352	525,666	536,419
D. L. & W. ....	545,419	844,464	891,481	908,538
D. & H. ....	833,254	845,033	901,325	893,358
Penna. ....	408,490	438,144	497,953	560,665
Erie ....	346,144	643,930	710,212	547,919
N. Y. O. & W. ....	160,306	173,913	176,604	177,427
L. & N. E. ....	261,014	298,040	300,400	295,341
	4,814,211	6,155,878	6,319,957	6,389,100
	August	September	October	Total 7 months
P. & R.....	1,401,849	537,176	1,317,070	8,026,710
L. V. ....	1,159,816	534,440	1,180,270	7,272,781
C. of N. J. ....	510,593	348,978	486,609	3,197,082
D. L. & W. ....	878,222	642,016	846,054	5,556,194
D. & H. ....	917,579	736,160	893,058	6,019,767
Penna. ....	513,233	243,540	484,940	3,146,965
Erie ....	358,740	285,074	531,598	3,423,617
N. Y. O. & W. ....	177,151	149,260	190,958	1,205,619
L. & N. E. ....	290,470	116,310	310,344	1,871,919
	6,207,653	3,592,954	6,240,901	39,720,654

INTERSTATE VS. INTRASTATE.—There is no doubt of the power and duty of the Interstate Commerce Commission to control interstate rates when necessary to protect interstate transportation. It is unfortunate that what seems to be such an inroad on the reserved rights of the states should have to be made by judicial construction. The action, however, was necessary. In many of the states the commissions have been petty politicians seeking to curry favor with the home vote by diverting traffic from its natural course in order to benefit state industries. The Shreveport case, in which the law was first settled by the Supreme Court of the United States, was the result of a scandalous order of the Texas Commission.—*San Francisco Chronicle*.

## Commission and Court News

### Interstate Commerce Commission

The commission has suspended until March 28 the operation of certain tariffs which provide for a uniform increase of 20 cents per net ton in the rates on coal, c. l., from points on the Cumberland Railroad to points on the Louisville & Nashville, and on connecting lines.

The commission has suspended until April 14 the operation of a Pennsylvania tariff which provides for the cancellation of and increase in water competitive rates on lumber, from Portsmouth and other Virginia points to Newark, Communipaw, Bridgeton and other points in New Jersey.

The Interstate Commerce Commission has suspended from December 1 to March 31 the proposed increases in demurrage rates and changes in the rules governing weather interference, bunching and the average agreement, filed by J. E. Fairbanks, as agent for the railroads.

The Commission has suspended until March 31, tariffs governing the diversion and reconsignment of fruits and vegetables and other commodities shown in tariffs of various carriers throughout the United States effective December 1, 1920, and later dates. The suspended schedules provide increased charges and restrict the number of diversions or reassignments that may be permitted.

The Commission has suspended until April 4 the operation of certain tariffs which provide for the cancellation of joint through class and commodity rates on lumber, gravel and chatts from points in Arkansas, Colorado, Kansas, Missouri, Nebraska, New Mexico and Utah to Rosedale, Kan., and Westport, Mo., via Lenexa, Kan., in connection with the Missouri & Kansas Railway, leaving combination rates applicable instead.

Arthur S. Goodeve, a member of the Canadian Railway formal criticisms of and suggested changes in the conditions of the domestic bill of lading now in use by carriers in Official and Western classification territories, and, it appearing desirable that further hearing be held respecting the form and substance of the uniform domestic bill of lading proposed by carriers and submitted to the commission in prior proceedings, the commission has announced a hearing before Commissioner Woolley at Chicago on December 16.

### Personnel of Commissions

Arthur S. Goodeve, a member of the Canadian Railway Board, died November 23 at Toronto. Mr. Goodeve was born in 1860 at Guelph, Ont., and in 1896 went to British Columbia, where he became identified with public affairs and was elected to the Dominion Parliament. In 1912 he was appointed a member of the Railway Board and served with that body until the time of his death.

### Court News

#### Distribution of Coal Cars

A coal company sued the Southern Railway to enjoin the latter's practice, in time of car shortage, to deliver assigned cars, of whatever ownership, to mines with which the owners had contracts for coal, counting them against the quota of such mines under their respective ratings, under Interstate Commerce Act, § 1, as amended by Transportation Act, Feb. 28, 1920, and distributing commercial cars only to fill such quotas. The federal district court for the Northern District of Alabama dismissed the suit as presenting an administrative question for determination by the Interstate Commerce Commission, and not being within the jurisdiction of the federal district court.—*Corma Coal Co. v. Southern*, 266 Fed. 726.

## Equipment and Supplies

### Car Production—Ten Months' Figures

The production of freight cars for domestic service in October by the 23 car building companies reporting to the Railway Car Manufacturers Association, totaled 5,999, this making a total for the first ten months of the year of 33,584. The total for the month of October compared with a production of 3,529 for the month of September, and with a monthly average for the preceding months of about 3,000. The production of passenger cars for domestic service totaled 21, making a total for the year, up to October 31, of 129. The number of freight cars for domestic service on order and undelivered on October 31, 1920, was 46,051, as compared with 48,114 on September 30. The car repairs for October totaled 3,920, making a total for the year, to October 31, of 25,180. The number of car repairs on order at the end of October was 28,045; at the end of September it was 26,710. The figures for the month and the accumulated figures for the year are shown in the tables below. The names of the car building firms supplying the figures were given in the *Railway Age* September 24 (page 511). The figures follow:

TABLE I—CARS DELIVERED

	Freight cars		Passenger cars	
	Domestic	Foreign	Domestic	Foreign
January .....	4,482	1,904	1	9
February .....	3,774	1,039	4	..
March .....	2,796	1,994	11	28
April .....	2,127	1,912	15	..
May .....	2,630	1,387	..	..
June .....	2,608	708	..	21
July .....	2,583	380	18	27
August .....	3,056	1,184	21	13
September .....	3,529	1,088	38	..
October .....	5,999	668	21	13
	33,584	12,264	129	111

TABLE II—CARS ON ORDER AND UNDELIVERED  
(Figures for end of month)

	Freight cars			Passenger cars		
	Domestic	Foreign	Total	Domestic	Foreign	Total
December, 1919 .....	24,816	10,720	35,536	407	110	517
January, 1920 .....	27,282	9,381	36,663	311	103	414
February .....	29,706	8,389	38,095	282	103	385
March .....	33,061	7,854	41,455	522	80	602
April .....	42,869	7,180	50,049	586	88	674
May .....	47,761	6,338	54,099	732	110	842
June .....	48,171	7,792	55,963	796	97	893
July .....	50,275	8,212	58,487	811	88	899
August .....	49,442	7,574	57,016	861	75	936
September .....	48,114	6,793	54,907	903	75	978
October .....	46,051	7,026	53,077	851	66	917

TABLE III—FREIGHT CAR REPAIRS

	Delivered during month	Delivered Jan. 1 to end of month	On order and undelivered at end of month
May .....	2,296	10,442	20,130
June .....	2,541	12,983	24,092
July .....	2,491	15,474	23,541
August .....	2,818	19,269	27,031
September .....	3,140	21,260	26,710
October .....	3,920	25,180	28,045

### Locomotives

THE LONG ISLAND RAILROAD is inquiring for some 0-8-0 type locomotives.

THE QUEENSLAND GOVERNMENT RAILWAYS, AUSTRALIA, is inquiring, through the locomotive builders, for 54, 4-8-0 type locomotives.

### Freight Cars

THE KAI-MUN TRADING COMPANY, 2 Rector street, New York, is inquiring for 200, 30-ton flat cars for export to China.

FOX BROTHERS & Co., 126 Lafayette street, New York, are inquiring for 36 narrow-gage flat cars, of 4 to 5 tons capacity, for export to Mexico.

THE NORTHERN PACIFIC, reported in the *Railway Age* of November 19 as contemplating the purchase of 1,000 freight cars, is now inquiring for 1,000, 40-ton box cars.

THE AMERICAN REFRIGERATOR TRANSIT COMPANY, St. Louis, Mo., is having repairs made to 100 refrigerator cars at the shops of the Western Steel Car & Foundry Company.

### Passenger Cars

THE BESSEMER & LAKE ERIE is inquiring for 8 steel coaches, 4 baggage and 3 combination mail and baggage cars.

### Iron and Steel

THE BALTIMORE & OHIO has ordered 20,000 additional tons of rails from the United States Steel Corporation.

THE CHICAGO & NORTH WESTERN has ordered 50,000 tons of rails from the United States Steel Corporation.

THE PENNSYLVANIA SYSTEM is reported to have placed an order for 150,000 tons of rails with the United States Steel Corporation, for 1921 requirements.

### Trade Publications

SHEARING STRESSES IN CONCRETE BEAMS.—The Truscon Steel Company, Youngstown, Ohio, has recently issued a 12-page illustrated booklet devoted to the shearing stresses in reinforced concrete beams. The value and requirements of proper beam reinforcement and design are included, as well as data from numerous tests.

SAFETY AND EFFICIENT OPERATION OF MOTOR CARS.—The Buda Company, Harvey, Ill., has recently issued a booklet on the subject of the vital features affecting the safety and efficient operation of railway motor cars. This booklet deals with the uses and abuses of motor cars and contains hints and suggestions for insuring better methods.

GUNITE SLABS.—The Cement Gun Construction Company, Inc., Allentown, Pa., has issued a pamphlet containing 32 pages of data in the form of diagrams and tables on the design of reinforced concrete slabs made of "Gunite" concrete. This information is based on the results of the tests made under the supervision of M. O. Fuller, adjunct professor of civil engineering, Fritz Laboratory, Lehigh University.

MALLEABLE CASTINGS.—The American Malleable Castings Association has published a chart which is designed to show the present status of the malleable iron industry. The chart gives a graphical representation of the castings shipped by the member firms as compared with the capacity of the foundries. The association points out that it is expected that the tonnage of unfilled orders will be reduced in the near future and better deliveries will be made than have been possible since 1915.

PORTABLE ELECTRIC DRILLS.—The complete line of electric air compressors, portable electric drills and electric valve grinders made by the Black & Decker Manufacturing Company, Baltimore, Md., is described in Catalogue No. 2, recently issued by this company. The booklet includes descriptions of compressors of various capacities, electric drills for drilling holes up to 7/8 in. and reaming up to 7/16 in. in steel. The mechanical and electrical features of the equipment are quite fully described and the construction is shown by sectional views.

INDUSTRIAL RELATIONS WORK OF WESTINGHOUSE AIR BRAKE COMPANY.—An attractive illustrated book describing the agencies that have been established to promote the general well-being of the employees and to facilitate pleasant, harmonious industrial relations, has recently been issued by the Westinghouse Air Brake Company as publication 9044. The efforts of this company to co-operate with its employees have extended over more than a half century. At present the company has an Industrial Relationship Committee, a pension system, a relief department, a workmen's compensation fund, Y. M. C. A. and Y. W. C. A. buildings and other social activities. All these are outlined in a manner that makes the book valuable to anyone interested in the subject of relation between employer and employee.

## Supply Trade News

**George Baker**, formerly general sales manager for the **Illinois Steel Company**, Chicago, who retired from active service about two years ago, died on November 18.

The **General Railway Devices Company** has been organized at Racine, Wis., with **W. H. Osborne** president, **John G. Osborne**, vice-president, and **W. V. Osborne** secretary and treasurer.

**Edward Buker** has been appointed representative of the car seat department of the **Heywood Brothers & Wakefield Company**, Wakefield, Mass., with office and exhibits at 1415 Michigan avenue, Chicago.

**Harry U. Morton**, president of the **Morton Manufacturing Company**, Chicago, formerly the **Dunbar Manufacturing Company**, change of whose name was noted in the *Railway*

*Age* of November 26 (page 950), entered railway service with the **Pullman Company** in 1891. He served this company for 4 years in the manufacturing department, and 13 years in the operating department. In 1907, he was appointed vice-president and general manager of the **General Railway Supply Company**, Chicago, and seven years later became vice-president and secretary of the **Acme Supply Company**, Chicago. The corporate name of this company was changed to the **Dunbar Manufacturing Company** in 1917, and on April 1 of that year Mr. Morton was elected president and treasurer of the company. **Charles D. Morton**, secretary and treasurer of the **Morton Manufacturing Company**, is the son of H. U. Morton, the president of the company. He is a graduate of the **University of Wisconsin**, class of 1917. He entered service with the company immediately upon receiving his discharge from the army in January, 1919.

The **Toledo Crane Company**, with main office and works at Bucyrus, Ohio, chartered in Ohio, with a capital of \$500,000, will on January 1, 1921, succeed **The Toledo Bridge & Crane Company**, of Toledo, Ohio, as builders of Toledo cranes.

The new company has bought all drawings, patterns, records, and every item pertaining to the crane business. **W. F. Billingsley**, who for the past 11 years has been active in the management of the crane department for the **Toledo Bridge & Crane Company**, will hold an executive position and be active in the management of the new company and will have with him intact the present crane department organization of the **Toledo Bridge & Crane Company**.



H. U. Morton



C. D. Morton

## Railway Construction

**CANADIAN NATIONAL**.—This company is contemplating the erection of a 350-ton coaling station at **Chaudiere Junction, Que.**

**CHICAGO & NORTH WESTERN**.—This company has awarded a contract to **Gaffin & Gehri**, **Fond du Lac, Wis.**, for the construction of an ice house of 15,000 tons capacity at **Fond du Lac**, to cost approximately \$44,000.

**CANADIAN PACIFIC**.—This company plans to develop a local freight yard at **Windsor, Ont.**, with team tracks for 320 cars and freight shed tracks for 40 cars. The contract for grading and track work for that portion of the team tracks to be installed this year has been let to **A. E. Rigby**, **St. Catharines, Ont.** Additional team tracks and the freight shed will probably be installed during 1921. The work is estimated to cost approximately \$500,000.

**CHICAGO, ROCK ISLAND & PACIFIC**.—This company will construct an ice house, 30 by 150 ft., at **Belleville, Kan.**, to replace a structure destroyed by fire.

**CHICAGO UNION STATION**.—This company, which was noted in the *Railway Age* of November 12 (page 861), as accepting bids for the construction of a tunnel under **Harrison street**, between **Canal street** and the **Chicago river**, has let a contract for this work to the **W. J. Newman Company**, Chicago.

**CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS**.—This company has let a contract to the **Walsh Construction Company**, **Davenport, Ia.**, for the grading and to **I. D. Tuttle**, **Springfield, Ohio**, for the bridges on eight miles of second track under construction from **Winchester, Ind.**, to **Farm Land**. This work will cost approximately \$800,000. Fifteen miles of second track from **Houston, Ohio**, to **Ansonia**, were put into operation on November 15.

**ILLINOIS CENTRAL**.—This company contemplates the construction of new shops at **Dubuque, Iowa**. The company is also considering an extension to its present shop facilities at **Waterloo, Iowa**.

**LOUISVILLE & NASHVILLE**.—This company contemplates the construction of a 600-ton coaling and sanding station at **Loyall, Ky.** The structure will be of reinforced concrete and will provide facilities for coaling and sanding locomotives on four tracks.

**PACIFIC GREAT EASTERN**.—This company is constructing a line from **Williams Lake, B. C.**, to **Deep Creek**, a distance of 16 miles. The company has recently commenced operation of its new line, 68 miles in length, extending from **Lone Butte, B. C.**, to **Williams Lake**. Completion of the **Williams Lake-Deep Creek** line will permit the **Great Eastern** to commence train service from **Vancouver** to **Deep Creek**, a distance of 294 miles.

**PERE MARQUETTE**.—This company has awarded a contract to the **Roberts & Schaefer Co.**, Chicago, for the construction of a sand storage and gravity drying plant at the engine terminal now under construction at **Saginaw, Mich.** This company is also building engine terminals at **New Buffalo, Mich.**, and **Plymouth, Mich.**

**ST. LOUIS-SAN FRANCISCO**.—This company contemplates the construction of a second track near **Afton, Okla.**, in the spring.

**ST. LOUIS-SAN FRANCISCO**.—This company, which was noted in the *Railway Age* of October 22 (page 726) as accepting bids for the construction of a one story, brick freight house at **Ada, Okla.**, to cost approximately \$50,000 has let a contract for this work to the **Kelly-Atkinson Construction Company**, Chicago.

**VICTORIA, B. C.**.—This city is accepting bids for the construction of the substructure of a new railway bridge at **Johnson street**, **Victoria**. The project will involve one 110 ft. plate girder approach span, one 73 ft. plate girder approach span, and a **Strauss** bascule span 150 ft. long. Facilities for vehicles and pedestrians will also be provided.

## Railway Financial News

**BOSTON & MAINE.**—The Interstate Commerce Commission has approved a loan of \$6,696,479 to this company to aid it in providing itself with locomotive equipment, and certain additions and betterments to existing equipment, and to its roadway and structures, at a total estimated cost of about \$7,869,000. The company itself is required to finance about \$1,212,000 to meet the loan of the government.

**CANADIAN NORTHERN.**—A syndicate headed by Wm. A. Read & Co. have sold at 100 and interest \$25,000,000 20-year 7 per cent sinking fund gold debenture bonds, dated December 1, 1920. The Dominion of Canada guarantees principal and interest by endorsement.

**CAROLINA, CLINCHFIELD & OHIO.**—This company has applied to the Interstate Commerce Commission for authority to issue \$5,000,000 of 15-year 6 per cent cumulative income debentures, the proceeds of which are to be used to pay \$4,124,000 of short-term notes and such other current indebtedness as may be met by the balance.

**CHESAPEAKE & OHIO.**—This company has applied to the Interstate Commerce Commission for an order authorizing the authentication and delivery of \$2,699,000 of its first lien and improvement 20-year mortgage bonds, to be pledged with other securities for a loan of \$3,759,000 from the United States for the purchase of equipment. The company also asked authority to issue \$4,500,000 of 6½ per cent equipment trust certificates maturing annually from December 1, 1924, to December 1, 1935, which bonds have been sold to Kuhn, Loeb & Co. and the National City Company at 95, subject to the commission's approval.

**CHICAGO & WESTERN INDIANA.**—This company has applied to the Interstate Commerce Commission for authority to issue its consolidated 4 per cent mortgage bonds to the amount of \$255,000 for the purpose of retiring general mortgage bonds.

**DENVER & RIO GRANDE WESTERN.**—The articles of incorporation granted this company by the state of Delaware on November 15, for the purpose of taking over the Denver & Rio Grande, were filed with the secretary of state of Colorado at Denver on November 30. Court confirmation of the sale of the Denver & Rio Grande to the Western Pacific will be given December 18.

**ELGIN, JULIET & EASTERN.**—The Interstate Commerce Commission has authorized this company to issue \$1,800,000 of equipment trust bonds to be dated April 1, 1920, at 6 per cent, to be secured by an equipment trust agreement for the payment of 500 double sheathed box cars of 80,000 lb. capacity, and eight 8-wheel heavy switching engines which were allotted to the company by the director-general of railroads.

**JACKSONVILLE TERMINAL.**—The Interstate Commerce Commission has authorized this company to issue, from time to time, during a period of not exceeding two years, promissory notes for \$100,000, face amount, and \$67,500, face amount, in renewal, respectively, of certain outstanding promissory notes for like amounts.

**MISSOURI PACIFIC.**—O. E. Robinson, special master under the final decree in the foreclosure of this company, has filed a report at St. Louis, Mo., announcing that he will make final payments December 21 to all holders of 6 per cent refunding bonds of the company.

**NORFOLK & WESTERN.**—The Interstate Commerce Commission has granted this company permission to purchase the Tug River & Kentucky and the Williamson & Pond Creek railroads. The first road will cost \$53,744, and the second, \$71,994. Both roads are subsidiaries of the Norfolk & Western.

**SOUTHERN PACIFIC.**—The plan for the segregation of this company's oil properties was announced by the board of directors on December 1 as follows:

"A new company, to be known as the Pacific Oil Company,

will be organized under the laws of the State of Delaware with a capital stock to consist of 3,500,000 shares of no par value for which the Southern Pacific Company will subscribe at \$15 per share, or \$52,500,000. From the amount so realized the new company will purchase from the Southern Pacific Land Company, as of January 1, 1921, for \$43,750,000:

"(a) About 259,000 acres of land now owned by the Southern Pacific Land Company, situated in the State of California, of which about 25,000 acres are proven oil lands and the remainder lands heretofore withdrawn from sale as possible oil lands, together with existing field improvements and materials and supplies.

"(b) 200,690 shares, par value \$20,069,000, representing 50.48 per cent of the outstanding capital stock of the Associated Oil Company.

"By the sale of these properties the Southern Pacific Land Company, the entire capital stock of which is owned by the Southern Pacific Company, will thus receive \$43,750,000 in cash and the Pacific Oil Company will retain \$8,750,000 as working capital.

"Holders of the capital stock of the Southern Pacific Company registered as such on the books of the company at the close of business on January 14, 1921, will be given the right to purchase at \$15 per share, payment to be made in full on or before March 1, 1921, one share of stock of the new company for each share of Southern Pacific Company stock so held.

"For the information of stockholders and the holders of the 5 per cent convertible bonds of the company it is proper to state that the stock of the new company is fixed at 3,500,000 shares to correspond as nearly as may be to the total number of shares of the Southern Pacific Company's stock outstanding, together with shares reserved for the conversion of these bonds.

"The stock of the Associated Oil Company is at present receiving dividends at the rate of 6 per cent per annum. The net earnings of the Southern Pacific oil properties above referred to, for the year 1920, after deduction of all taxes and proper reserves for depreciation, will approximate \$12,000,000, and the earnings for the year 1921, based upon the present estimated oil production and prices, should considerably exceed this sum.

"The directors of the new Pacific Oil Company are: James S. Alexander, B. D. Caldwell, Henry W. deForest, Charles A. Peabody, Samuel Rea, Mortimer L. Schiff, E. P. Swenson and Paul Shoup, president of the Associated Oil Company of California."

**TENNESSEE CENTRAL.**—Judge Sanford, in the federal court at Chattanooga, on November 27 denied the application of the Mississippi Valley Trust Company of St. Louis, trustee for the first mortgage bonds held by the Illinois Central and Southern railways, for an order of sale of this road, stating that the conditions of the market were not right for a sale at this time. The Tennessee Central was offered for sale five times during 1917, but there were no bidders and the receivership was continued under H. W. Stanley and W. K. McAlister.

**WESTERN PACIFIC.**—This railroad corporation has increased its capital stock from \$75,000,000, consisting of 275,000 shares of preferred stock and 475,000 shares of common stock to \$100,000,000, consisting of 400,000 preferred shares and 600,000 shares of common stock.

**WHEELING & LAKE ERIE.**—This company has applied to the Interstate Commerce Commission for authority to issue \$1,528,000 of 5 per cent refunding mortgage bonds to reimburse the treasury for expenditures and to be deposited as collateral for a loan from the United States and for a note representing the funding of its indebtedness to the government for the period of federal control, also to be pledged with the trustee of the National Railway Service Corporation's equipment trust. The company also asks authority to participate in the National Railway Service Corporation's equipment trust in the purchase of equipment amounting to \$8,260,000.

**THE GOVERNMENT'S SHIPPING BUSINESS.**—Government out of its sphere is an easy boss and a liberal paymaster, but it is victimized in many ways and its achievements bear price-marks that would stagger an individual trained to his task. Business is a calling mastered in all its details by few persons and never by Government.—*N. Y. World.*

# ANNUAL REPORT

## St. Louis Southwestern Railway Company—Twenty-Ninth Annual Report

OFFICE OF CHAIRMAN OF THE BOARD OF DIRECTORS.

NEW YORK, July 15, 1920.

### To the Stockholders:

Herewith is presented the Twenty-ninth annual report of your company, for the calendar year ended December 31, 1919.

In the report of Mr. J. M. Herbert, President, which follows, will be found Corporate financial exhibits, also exhibits furnished by the United States Railroad Administration, showing results from operation of the property.

In conformity with program previously outlined and authorized by officers of the railway company, the Director General of Railroads expended during the year 1919 for additions and betterments the sum of \$1,773,348.58. The exhibit shows a net total of expenditures for Road and Equipment of \$1,411,600.25 instead of \$1,773,348.58, the difference of \$361,748.33 representing a credit to the account covering equipment retired during the year.

No change was made in the capital stock of the Company during the year. The funded debt was decreased during the year 1919 in the sum of \$301,000.00 through the payment of equipment trust obligations at maturity.

For the Board of Directors.

EDWIN GOULD, Chairman.

St. Louis, Mo., July 1, 1920.

MR. EDWIN GOULD,

Chairman of Board of Directors,  
New York, N. Y.

DEAR SIR:—

Report for the year ended December 31, 1919, is submitted herewith. All tables reflecting results of operation for the year were supplied by the United States Railroad Administration and are included in this report for the purpose of preserving the continuity of the exhibits.

During the early part of the year, the railway company became involved in a controversy with the United States Railroad Administration with respect to the proper and necessary maintenance of its property, particularly the roadway and structures, and in order that the matter may be understood by the company's stockholders, I am giving a brief résumé, as follows:

Effective with April, 1919, the regional director instructed the federal manager that expenditures for maintenance of way and structures would be limited to \$2,000.00 per operated mile, and that this allowance would be retroactive to January, 1919.

Up to and including the month of March, the federal manager had not been limited to a specific allowance for maintenance of way and structures and the expenditures for the first three months of the year were on the basis of \$2,857.48 per operated mile.

By making the allowance of \$2,000.00 per mile retroactive to January 1, 1919, it had the effect of reducing the appropriation for maintenance by \$1,143.00 per mile, or 40 per cent, since the expenditures for the first three months had been made at the rate of \$2,857.48 per mile per annum, and by requiring the federal manager to make up the amount expended in excess of the rate of \$2,000.00 per mile from January 1, 1919, it left for the remaining nine months, an appropriation equal to \$1,714.00 per mile per annum.

This reduction was made effective at the beginning of the season most favorable for maintenance work, and instead of being reduced by 40 per cent, it should have been largely increased during the heavy maintenance season and the reduction made during the season of unfavorable working conditions.

Upon being advised of this policy, I immediately took the matter up with the director of operation, advising him that the property could not be maintained in condition for safe operation of trains at normal speed on this reduced appropriation, and that the property was in immediate need of an additional allowance to maintain it in safety. My statements were challenged by the Administration representatives having jurisdiction over the property, and after repeated demands that the Central Administration at Washington obtain first-hand information in regard to the condition and needs of the property, the director of operation sent two members of his staff to make an inspection of the road.

Accompanied by the local federal representatives, as well as representatives of the corporation, inspection party left St. Louis on June 13, and the trip terminated at Big Sandy, Texas, on June 19. In the report made to the director of operation under date of July 5, representative of the Central Administration made the following statement:

"The federal manager proceeded with the maintenance of way work in 1919 on the same program as in 1918, until approximately March 15, when he was notified to reduce the expenditure. This disarranged the season program and led to an unbalanced and unwise expenditure of the available funds prior to the reduction to the \$2,000.00 a mile basis. The result of these conditions is that while on the whole the funds paid and appropriated for maintenance of way and structures to January 1, 1920, would be sufficient to maintain the property, there are certain items which will not be maintained, between now and the close of the year, in safety for the operation of trains at the usual speed by the expenditure of the unexpended balance available on May 1, 1919, on the \$2,000.00 a mile basis."

The expenditures made during the first three months of 1919 were not only unbalanced and unwise, but in some respects were positively detrimental to the condition of the property, inasmuch as the track was disturbed in putting in ties at a season most unfavorable for this work and when the season was at hand when the work should have been prosecuted most vigorously, the allowance had been reduced by \$1,143.00 per mile, so that sufficient funds were not available to carry on the work suitable to the season.

In summarizing his findings, the representative of the Central Administration made the following recommendation:

"It is recommended that additional amounts as follows should be expended during the remainder of 1919 to maintain the St. Louis Southwestern Railway in safety for the operation of trains at the usual speed. These amounts to be approved by and charged to the Corporation.

Roadway maintenance and track laying and surfacing.....	\$132,077.00
Bridges, Trestles and Culverts.....	212,633.00
Ties.....	70,817.00

Total additional allowance recommended to maintain the railroad in safety for normal operation..... \$415,527.00

I declined, on behalf of the corporation, to accept responsibility for the additional allowance recommended, for the purpose of maintaining the property in safety for the operation of trains at normal speed, until the physical condition of the roadway became so bad that I wired the director of operation under date of September 3, as follows:

"Your letter August twenty and telegram same date. In consideration of the numerous wrecks and derailments occurring on the lines of the St. Louis Southwestern Railway System, traceable to inadequate inspection and maintenance, resulting in death and injury to employees and others, I am willing in interest of safety of public and employees that four hundred fifteen thousand five hundred twenty seven dollars recommended in addition to unexpended portion of \$2,000.00 per mile per annum be expended,

leaving question of whether administration or corporation should be charged with above amount open for future determination, and with the proviso that work should begin immediately. Will appreciate prompt reply.

Under date of September 11, the federal manager was authorized to spend the additional amount recommended, but the benefit that would have accrued to the property had the expenditure been authorized at the proper time and judiciously spent, was in large part wasted, on account of the lapse of five and one-half months of favorable working season.

In order to confirm, through unbiased authority, my charges that the maintenance of the company's property had been neglected to the point where it had become unsafe for public use, I requested the Public Service Commission of the States of Arkansas and Texas to make an inspection of the property. Both of these bodies responded to this request, accompanied by corporate and federal representatives, stopping at numerous points and walking the track. The reports submitted as result of these inspections confirmed in practically every detail the charges which I had made.

I also employed Mr. J. W. Kendrick, an expert railroad engineer and manager, to make inspection and report on condition of the property.

Accompanied by officers of the company, as well as the federal representatives in charge of maintenance, inspection was made between September 24 and October 2, during which time many miles of track, selected at random, were walked over and the conditions noted in detail. The benefit of all this information was offered to the director general of railroads and he was furnished with copy of report made by the Railroad Commissions of Arkansas and Texas, but he chose to sustain the action of his subordinates rather than accept the findings of two unbiased bodies of men and a consulting engineer of undisputed standing and integrity.

After being convinced of the manner in which the director general of railroads construed his obligation for maintenance of the carrier's property, we declined to enter into the standard form of agreement, choosing to stand on our rights under the terms of the Federal Control Act, wherein it is required that the carrier's property shall be returned in substantially the same condition as when taken over by the Government.

Although we have not been officially advised, it developed in conference with the director of finance of the Railroad Administration that the director general has set up a charge against the railway company for alleged maintenance of its property in excess of his obligation to maintain it, based on a clause of the standard agreement providing that the expenditure of an amount equal to the average of the test period, equated to the basis of current prices, shall constitute a full compliance with the director general's obligation for maintenance, but not being party to this agreement the company does not recognize this interpretation of the law and we not only shall resist any such claim, but shall file and prosecute a claim for a substantial amount on account of improper and inadequate maintenance.

Since the separation of federal and corporate officers and employees, which became effective July 1, 1918, the railway company has maintained an efficient accounting and engineering staff who have been diligently engaged in checking and auditing each and every item of expense allocated to the corporate account in the segregation of the federal and corporate interests, as well as all charges for additions and betterments. In carrying out this work, numerous errors have been discovered and many thousands of dollars have been credited to the corporation. We have also filed claim with the Railroad Administration for \$924,034.20 for overcharge on additions and betterments as result of this audit. This force is still engaged in this work and will continue as a separate organization until such time as the final status of the railway company's account with the railroad administration is determined and agreed to.

In this connection, it may not be amiss to state that the accounting organizations of railroads as a whole have been greatly demoralized by reason of the unprecedented demands made upon them during the period of federal control, and it will take much time and effort to restore the efficiency heretofore taken as a matter of course. The railway company is still required to furnish special and periodical accounting reports to the Railroad Administration, the burden of which constitutes a considerable handicap in the handling of the corporate affairs, and no compensation whatever is allowed for this service. Respectfully submitted,

J. M. HERBERT, President.

### CORPORATE INCOME STATEMENT—SYSTEM—YEAR ENDED DECEMBER 31, 1919.

Item.	Amount.
Standard Return:	
Tentative standard return (as certified by Interstate Commerce Commission) .....	\$3,910,913.51
Non Operating Income:	
Income from lease of road.....	\$4,676.67
Miscellaneous rent income.....	39,475.24
Miscellaneous non-operating physical property—profit .....	8,384.49
Dividend income .....	44,600.00
Interest income from funded securities.....	210,711.67
Interest income from unfunded securities and accounts .....	62,289.43
Miscellaneous income .....	289,602.16
Gross income .....	\$4,570,653.17
Deductions from Gross Income:	
Maintenance of corporate organization.....	\$164,657.79
Railway tax accruals .....	72,607.43
Rent for leased roads.....	283,600.00
Miscellaneous rents .....	473.92
Interest on funded debt.....	2,250,490.41
Interest on unfunded debt.....	63,212.01
Miscellaneous income charges.....	389,702.88
Income balance transferred to profit and loss.....	\$1,345,908.73

### CORPORATE PROFIT AND LOSS STATEMENT—SYSTEM—DECEMBER 31, 1919.

Item.	Amount.
Credits:	
Credit balance (at beginning of fiscal period).....	\$8,941,859.04
Credit balance transferred from income.....	1,345,908.73
Donations .....	424.54
Miscellaneous credits .....	15,571.53
Total .....	\$10,303,763.84
Debits:	
Surplus appropriated for investment in physical property .....	\$424.54
Loss on retired road and equipment—Road.....Cr.	8,344.69
Loss on retired road and equipment—Equipment.....	71,342.29
Miscellaneous debits .....	1,427.20
Balance, Credit, Carried to General Balance Sheet.....	10,238,914.50
Total .....	\$10,303,763.84

FEDERAL INCOME STATEMENT—SYSTEM—SHOWING RESULT OF OPERATION OF  
THE PROPERTY BY THE DIRECTOR GENERAL OF RAILROADS,  
YEAR ENDED DECEMBER 31, 1919.

Item.	Amount.
Operating Income:	
Railway operating revenues.....	\$20,661,162.63
Railway operating expenses.....	18,332,583.36
Net revenue from railway operations.....	\$2,328,579.27
Railway tax accruals.....	\$780,574.93
Uncollectible railway revenues.....	4,182.07
Total .....	\$784,757.00
Railway operating income.....	\$1,543,822.27
Non-Operating Income:	
Hire of freight cars—Credit balance.....	\$158,474.48
Rent from locomotives.....	157,245.48
Rent from passenger-train cars.....	2,597.16
Rent from work equipment.....	34,210.90
Joint facility rent income.....	260,710.72
Interest income from funded securities.....	20,106.10
Interest income from unfunded securities and accounts..	7,292.52
Miscellaneous income (expense prior to January 1, 1918).	359,307.44
Total .....	\$999,944.80
Gross income .....	\$2,543,767.07
Deductions from Gross Income:	
Rent for locomotives.....	\$30,083.19
Rent for passenger-train cars.....	3,711.56
Rent for work equipment.....	7,310.89
Joint facility rent deductions.....	546,967.07
Interest on unfunded debt.....	40,720.14
Miscellaneous income charges (revenue prior to January 1, 1918)	279,562.16
Total .....	\$908,355.01
Balance of income.....	\$1,635,412.06
Standard return .....	3,910,913.51
Net deficit .....	\$2,275,501.45

A summary of the more important improvement work performed during the current year is as follows:

**INDUSTRIAL TRACKS**—Surveys for and estimates covering the construction of industrial tracks and applications for authorities for expenditures for their construction have been prepared. These tracks were required to take care of new business originating on the rails of this company.

**PASSING AND SIDE TRACKS**—A number of new passing, side and yard tracks were constructed or extended during the year in order to facilitate the movement of trains and to provide adequate storage for cars. A total of 49,467 feet of such new tracks and extensions, including industrial tracks, were constructed.

**REPLACING TRETTLES WITH PERMANENT OPENINGS**—Investigations were conducted, reports made and authorities for expenditure prepared for replacing a number of trestles with permanent openings, and a number of trestles were filled entirely, as it was found that they were unnecessary by reason of the diversion of water to new channels. A total of 1,092 lineal feet of trestle was filled and a total of 636 lineal feet of trestle was replaced with permanent openings.

**RAIL**—During the current year 31.27 track miles of 75 lb. rail was replaced with new 85 lb. rail as follows:

Between M. P. I-16.36 and M. P. I-22.54.....	6.18 miles
Between M. P. 268.69 and M. P. 269.53.....	.74 miles
Between M. P. 394.27 and M. P. 418.62.....	24.35 miles
Total .....	31.27 miles

**BALLASTING**—The work of ballasting with crushed rock between Malden, Missouri and Paragould, Arkansas, a distance of 45 miles, referred to in the last annual report, has been completed.

A total of 6,948 cubic yards of gravel ballast was applied during the year, between Camden, Arkansas and Genoa, Arkansas.

**NEW BUILDINGS**—New frame depots were erected during the year at Malden and Perkins, Missouri and Gillett, Arkansas.

**ROAD IMPROVEMENT DISTRICTS AND DRAINAGE DISTRICTS**—A considerable amount of work was performed in connection with making reports on road improvement districts and drainage districts, for which maps and other data had to be prepared.

**HIGH WATER**—There was some interference to traffic during the fall and winter months of 1919, not due, however, to high water and washouts, but to continuous rain, rendering the roadbed unsafe and causing slides in embankments and caving of the roadbed under the tracks. The average rain fall for 1919 was approximately 55 inches, which is 7 inches above the average normal annual precipitation.

EXPENDITURES FOR ROAD AND EQUIPMENT.

Item.	Amount.	Total.
Road—		
Engineering .....	\$3,571.67	
Land for transportation purposes.....	235.76	
Grading .....	139,136.90	
Bridges, trestles and culverts.....	323,841.17	
Ties .....	61,266.04	
Rails .....	101,091.67	
Other track material .....	162,356.72	
Ballast .....	17,480.15	
Track laying and surfacing.....	76,998.78	
Right of way fences.....	2,888.39	
Crossings and signs.....	4,305.23	
Station and office buildings.....	55,936.05	
Roadway buildings .....	1,715.12	
Water stations .....	1,982.78	
Fuel stations .....	6,407.60	
Shops and enginehouses .....	42,565.38	
Telegraph and telephone lines.....Cr.	8.64	
Signals and interlockers.....	287.95	
Paving .....	617.95	
Roadway machines .....	2,334.85	
Assessments for public improvements...	81,373.23	
Shop machinery .....	36,655.09	
Total .....	\$1,121,803.94	

General Expenditures—

Interest during construction.....Cr.	3,681.56	\$1,118,122.38
Analytical Summary of Foregoing Charges:		
Expenditures made by railway company (unfunded) .....	\$1,117,697.84	
Donations made by individuals and companies (appropriated from surplus) .....	424.54	\$1,118,122.38
Equipment—		
Equipment Other than Trust:		
Steam locomotives.....	\$2,867.91	
Freight-train cars .....	644,920.39	
Passenger-train cars.....	265.00	
Work equipment .....	7,172.90	
Retired Equipment—Cr.:		
Steam locomotives.....	\$3,635.18	
Freight-train cars.....	358,509.95	
Work equipment.....	496.80	
Total .....	361,748.33	293,477.97
Total .....		\$1,411,600.25

FEDERAL RAILWAY OPERATING REVENUES AND EXPENSES, NET REVENUE, UNCOLLECTIBLE RAILWAY REVENUES, CORPORATE AND FEDERAL RAILWAY TAX ACCRUALS, RATIOS AND AVERAGES PER MILE OF ROAD OPERATED—SYSTEM.

Item.	Year Ended.		Amount.	%
	Dec. 31, 1919.	Dec. 31, 1918.		
Average number of miles operated .....	1,754.5	1,783.4	—28.9	1.62
Operating Revenues.				
Transportation, Rail Line				
Freight revenue.....	\$15,821,318.13	\$14,365,854.49	+\$1,455,463.64	10.13
Passenger revenue.....	\$3,819,762.49	\$4,235,868.58	—\$416,106.09	9.82
Excess baggage revenue .....	21,304.98	18,167.65	+3,137.33	17.27
Parlor and chair car revenue .....	186.80	1,481.46	—1,294.66	87.39
Mail revenue.....	193,317.42	188,476.63	+4,840.79	2.57
Express revenue.....	448,478.42	441,193.67	+7,284.75	1.65
Other passenger-train revenue .....	9,046.21	25,063.34	—16,017.13	63.91
Total passenger-train revenue .....	\$4,492,096.32	\$4,910,251.33	—\$418,155.01	8.52
Switching revenue.....	\$60,370.75	\$60,756.97	—\$386.22	.64
Special service train revenue .....	10,603.17	3,226.80	+7,376.37	228.60
Other freight-train revenue .....	774.49	2,123.53	—1,349.04	63.53
Water transfers, passenger revenue .....	11,668.21	8,730.22	+2,937.99	33.65
Total other transportation revenue.....	\$83,416.62	\$74,837.52	+\$8,579.10	11.46
Total transportation revenue .....	\$20,396,831.07	\$19,350,943.34	+\$1,045,887.73	5.40
Incidental—				
Dining and buffet revenue .....	\$37,012.39	\$37,009.77	+\$2.62	.01
Station, train and boat privileges revenue.....	9,618.98	9,372.73	+246.25	2.63
Storage, freight, revenue .....	27,259.20	10,704.91	+16,554.29	154.64
Storage, baggage, revenue .....	1,542.83	996.74	+546.09	54.79
Demurrage revenue.....	107,078.75	101,870.14	+5,208.61	5.11
Rents of buildings and other property revenue .....	32,237.19	29,076.14	+3,161.05	10.87
Miscellaneous revenue .....	15,926.86	19,890.35	—3,963.49	19.93
Total incidental revenue .....	\$230,676.20	\$208,920.78	+\$21,755.42	10.41
Joint Facility—				
Joint facility revenue, Cr.	\$35,493.66	\$31,481.76	+\$4,011.90	12.74
Joint facility revenue, Dr.	1,838.30	2,584.86	—746.56	28.88
Total joint facility revenue .....	\$33,655.36	\$28,896.90	+\$4,758.46	16.47
Total operating revenues .....	\$20,661,162.63	\$19,588,761.02	+\$1,072,401.61	5.47
Operating Expenses.				
Maintenance of way and structures .....	\$4,127,515.65	\$3,226,375.16	+\$901,140.49	27.93
Maintenance of equipment .....	5,220,162.06	4,688,979.94	+531,182.12	11.33
Traffic expenses.....	314,113.78	376,206.76	—62,092.98	16.51
Transportation expenses .....	7,880,832.61	6,843,339.74	+1,037,492.87	15.16
Miscellaneous operations expenses .....	68,880.38	32,155.86	+36,724.52	114.21
General expenses.....	737,703.34	685,907.76	+51,795.58	7.55
Transportation for investment, Cr.....	16,624.46	12,350.44	+4,274.02	34.61
Total operating expenses .....	\$18,332,583.36	\$15,840,614.78	+\$2,491,968.58	15.73
Net revenue from railway operations .....	\$2,328,579.27	\$3,748,146.24	—\$1,419,566.97	37.87
Railway tax accruals (corporate and federal) .....	\$853,182.36	\$822,610.29	+\$30,572.07	3.72
Uncollectible railway revenues .....	\$4,182.07	\$2,303.18	+\$1,878.89	81.58
Total .....	\$857,364.43	\$824,913.47	+\$32,450.96	3.93
Railway operating income .....	\$1,471,214.84	\$2,923,232.77	—\$1,452,017.93	49.67

[Adv.]

## Railway Officers

### Executive

**C. F. Dos Passos** has been elected president of the Kansas, Oklahoma & Gulf, succeeding B. F. Hagerman, resigned. Mr. Dos Passos was born in New York City in 1889, and was educated at the New York University School of Law. He was admitted to the bar in 1909, and since that date has been practicing law in New York City. Mr. Dos Passos' headquarters will be at 20 Maiden Lane, New York City.

### Financial, Legal and Accounting

**R. Irwin**, claim agent on the Coast lines of the Atchison, Topeka & Santa Fe, with headquarters at Los Angeles, Cal., has been promoted to general claim agent, with the same headquarters, effective October 1. **L. Jessen**, assistant claim agent, with headquarters at Los Angeles, has been promoted to assistant general claim agent, with the same headquarters, effective same date.

### Operating

**F. H. Garner** has been appointed assistant superintendent of terminals on the Great Northern, with headquarters at Minneapolis, Minn., effective November 20.

**E. F. Baker**, inspector of agencies on the Southern, has been promoted to trainmaster on the Louisville division, with headquarters at Louisville, Ky., effective November 1.

**F. E. Smith** has been appointed superintendent of telegraph and telephone of the Eastern lines of the Atchison, Topeka & Santa Fe, with headquarters at Topeka, Kansas, effective November 1.

**C. L. Mason**, acting superintendent of the Missouri division of the Atchison, Topeka & Santa Fe, with headquarters at Marceline, Mo., has been appointed superintendent, with the same headquarters, effective November 1.

**C. C. Schoulty**, freight conductor on the Chicago, Indianapolis & Louisville, has been promoted to trainmaster of the Southern division, with headquarters at Bloomington, Ind., effective December 1, succeeding J. H. Cole, deceased.

**J. J. McCullough** has been appointed superintendent of the Puget Sound division of the Northern Pacific, with headquarters at Seattle, Washington, effective December 1, succeeding J. W. Allen, who has resumed his position as agent at Seattle.

**J. A. Caviezel**, whose appointment as assistant general manager of the Alabama, Tennessee & Northern was announced in the *Railway Age* of November 19 (page 905), was born at St. Joseph, Mo., August 19, 1884. He was educated at the Christian Brothers College of that city and first entered railway service in 1899 as an office boy for the St. Joseph & Grand Island. From 1900 to 1904 he served in various clerical positions in the auditor's office of the Chicago, Burlington & Quincy. In 1904 he went to Toledo, Ohio, as a clerk for the Toledo, St. Louis & Western, and in 1906 to Mobile, Ala., in the same capacity, for the Gulf, Mobile & Northern. In 1907 he became chief clerk to the auditor of the Alabama, Tennessee & Northern at Mobile, Ala. He was in the service of the Missouri & North Arkansas in a similar position at Eureka Springs, Ark., in 1908, when he was appointed general auditor of the Jonesboro, Lake City & Eastern, with which company he remained until 1912, when he was appointed auditor of the Alabama, Tennessee & Northern. In 1913 he became superintendent, and in 1915, general superintendent, the position he held at the time of his recent promotion.

### Traffic

**F. A. Bell** has been appointed general agent of the Fort Smith & Western, with headquarters at San Francisco, Cal.

**C. J. Helber** has been appointed general agent of the Wabash, with headquarters at Denver, Colo., effective November 15.

**William T. Price** has been appointed general agent on the Union Pacific, with headquarters at Kansas City, Mo., effective November 15.

**F. E. Godfrey** has been appointed assistant general freight agent on the Southern, with headquarters at Cincinnati, Ohio, effective December 1.

**J. P. O'Donnell** has been appointed general agent on the San Antonio, Uvalde & Gulf, with headquarters at Dallas, Tex., effective November 1.

**W. D. O'Brien** has been appointed general agent of the Great Northern, with headquarters at St. Paul, Minn., effective November 16, succeeding P. J. Pheeny, deceased.

**W. M. Wharton** has been appointed commercial agent of the Southern, with headquarters at Memphis, Tenn., and **E. L. Behr** commercial agent, with headquarters at Chicago, effective November 1.

**Edward Briggs**, general freight agent on the Wheeling & Lake Erie, with headquarters at Cleveland, O., has been given jurisdiction over the freight traffic department, and **T. J. McRoberts**, general passenger agent, with the same headquarters, has been given jurisdiction over the passenger traffic department. The office of traffic manager has been abolished.

**H. M. Spence**, assistant general baggage agent on the Canadian National and Grand Trunk Pacific, with headquarters at Winnipeg, Man., has been given jurisdiction over the lines east of Lucerne, B. C. **E. McDonald**, assistant general baggage agent, with headquarters at Vancouver, B. C., has been given jurisdiction over the lines west of and including Lucerne, with additional jurisdiction over the Grand Trunk Pacific Coast Steamship Company.

### Mechanical

**Eugene R. Gorman**, whose promotion to superintendent of motive power and machinery of the Chicago, St. Paul, Minneapolis & Omaha, with headquarters at St. Paul, Minn., was



E. R. Gorman

announced in the *Railway Age* of October 15 (page 679), was born on December 3, 1879, at Gorman Town, Minn. He entered railway service in April, 1900, as a locomotive fireman on the Chippewa Valley & Northern, a road owned and operated by the Arpin Hardwood Lumber Company, Bruce, Wis. In September, 1901, he became a locomotive fireman on the Western division of the Chicago, St. Paul, Minneapolis & Omaha. He was promoted to engineman and transferred to the Northern division in February, 1907, but left the company's service in May, 1908, to go with the Northern Pacific, working out of Missoula, Mont. In May, 1912, Mr. Gorman was appointed traveling engineer on the Northern division of the Chicago, St. Paul, Minneapolis & Omaha, with headquarters at Spooner, Wis., and served in this position until December, 1915, when he was

promoted to trainmaster on the same division. In May, 1917, he was made acting assistant superintendent of the Western division, with headquarters at St. James, Minn., this temporary promotion being made permanent in November, 1917. At the time of his recent promotion, Mr. Gorman was assistant superintendent of the Eastern division, with headquarters at Eau Claire, Wis., to which point he had been transferred in April, 1919.

**H. G. Bonney** has been appointed assistant master mechanic of the Lehigh & New England, with headquarters at Pen Argyl, Pa., succeeding N. R. Wright, resigned.

**L. E. Fletcher**, master mechanic on the Atchison, Topeka & Santa Fe, with headquarters at La Junta, Colo., has been promoted to superintendent of shops, with the same headquarters, effective November 1. **G. M. Lawler** succeeds Mr. Fletcher.

**C. M. Harris**, manager of the railroad shop section of the industrial department of the Westinghouse Electric Manufacturing Company, has been elected vice-president of the Hagerstown & Frederick, with headquarters at Hagerstown, Md.

### Engineering, Maintenance of Way and Signaling

**A. W. Hunter**, supervisor of signals on the Pennsylvania, with headquarters at Toledo, Ohio, has been appointed supervisor of telegraph and signals, with the same headquarters, effective December 1. The office of supervisor of signals has been abolished.

**J. N. Thompson**, road master of the Pittsburgh, Shawmut & Northern, with headquarters at Angelica, N. Y., has been appointed superintendent, maintenance of way, with the same headquarters. **H. L. Newman** has been appointed maintenance engineer, with headquarters at Angelica, N. Y. These appointments are effective November 22.

**T. J. Bivens**, assistant division engineer on the Union Pacific, with headquarters at Omaha, Neb., has been promoted to division engineer, with headquarters at Marysville, Kan., succeeding **W. H. Lowther**, who has been transferred to Denver, Colo., succeeding **W. G. Tinney**. Mr. Tinney has been transferred to Cheyenne, Wyo., succeeding **A. R. Jurden**, who has been transferred to Kansas City, Mo., succeeding **S. H. Osborne**. Mr. Osborne has been transferred to Omaha. The appointments were effective November 19.

**C. C. Hawken**, instrumentman on the Joplin division of the Missouri Pacific, with headquarters at Joplin, Mo., has been promoted to assistant engineer, with the same headquarters, succeeding **J. S. Bassett**, who has been assigned to other duties. **C. P. Huffman**, instrumentman on the Eastern division, with headquarters at Sedalia, Mo., has been promoted to assistant engineer on the Omaha division, with headquarters at Falls City, Neb., succeeding **R. M. Smith**, who has been assigned to other duties. **G. W. Payne**, instrumentman on the Arkansas division, with headquarters at Little Rock, Ark., has been promoted to assistant engineer on the Memphis division, with headquarters at Wynne, Ark., succeeding **H. H. White**. The promotions were effective November 9.

### Purchasing and Stores

**G. W. Bichlmeir**, purchasing agent of the Kansas City Southern, has been appointed purchasing assistant of the Union Pacific, with headquarters at Omaha, Nebr., effective November 15. Mr. Bichlmeir was born at Cincinnati, Ohio, September 10, 1886, and entered the employ of the Cincinnati, Hamilton & Dayton in 1906 as a clerk in the office of the purchasing agent. In 1909 he became a clerk in the department of Supply of the Missouri Pacific at St. Louis, Mo., and the following year was appointed chief clerk to the division storekeeper at Osawatimie, Kan., where he remained until January, 1911, when he became chief clerk to the general storekeeper of the Kansas City Southern. He remained in this position until 1917, when he resigned to engage in

business. In April, 1918, he again entered the employ of the Kansas City Southern as chief clerk to the purchasing agent and in August of the same year was appointed assistant to the purchasing agent. Mr. Bichlmeir was appointed purchasing agent of the Kansas City Southern in March, 1920, and was holding that position at the time of his recent appointment.

### Special

**H. W. Moore** and **D. H. Horning** have been appointed assistant chief surgeons of the Chicago & North Western, with headquarters at Chicago, succeeding **J. D. Andrews**, whose death was noted in the *Railway Age* of November 12 (page 864).

### Obituary

**J. J. Reynolds**, consulting engineer of the Elgin, Joliet & Eastern, died of pneumonia at his home in Chicago, on November 28.

**J. H. Cole**, trainmaster on the Chicago, Indianapolis & Louisville, with headquarters at Bloomington, Ind., died at Bloomington on November 11, following an accident which occurred on Monday morning, November 8. Mr. Cole, while riding on an engine in the Bloomington yards, was struck by a pole along the right of way and fatally injured.

**R. A. Campbell**, general freight agent of the Southern, with headquarters at St. Louis, Mo., died at Glendale, Cal., on November 12. Mr. Campbell was born at Mason, Ill., on April 13, 1854, and entered railway service in 1872 as a telegraph operator on the Illinois Central at Odin, Ill. His subsequent service was with the Evansville & Terre Haute, the Chicago & Eastern Illinois and in 1891 he was promoted to general passenger agent of these roads, with headquarters at Terre Haute, Ind. In 1894 he was made general freight and passenger agent of the Louisville, Evansville & St. Louis, and in 1901 he went to the Southern as assistant general freight agent, being promoted to general freight agent in 1907, the position he occupied at the time of his death.

**H. J. Small**, for many years general superintendent of motive power and machinery of the Southern Pacific, died October 28 at Berkeley, Cal. Mr. Small was born at Cobourg,

Ont., Nov. 15, 1849, and was educated at Toronto Normal School. He entered railway service in 1868 as a machinist on the Chicago North Western. A year later he became a draughtsman for the Kansas Pacific (now a part of the Union Pacific), which position he resigned in 1871 to become chief draughtsman for the Northern Pacific. In 1873 he went to Texas to become a general foreman on the International & Great Northern, which position he held until 1877, when he became master mechanic for the Gal-



H. J. Small

veston, Houston & Henderson. He left this position in 1879 to become master mechanic on the Texas & Pacific. In 1881 he was appointed superintendent of machinery of the Northern Pacific, and in 1887, assistant superintendent of motive power of the Philadelphia & Reading. Mr. Small became superintendent of motive power and machinery of the Southern Pacific in 1888, and, in 1902, was appointed general superintendent of motive power and machinery. He remained in this position until 1915, when he retired on account of ill health.